

Bonneville Power Administration

Proposed Appropriations Language

Expenditures from the Bonneville Power Administration Fund, established pursuant to Public Law 93-454, are approved for official reception and representation expenses in an amount not to exceed \$1,500.

During fiscal year [2004]2005, no new direct loan obligations may be made.

Explanation of Changes

The proposed appropriations language restricts new direct loans in FY [2004]2005 as in FY [2003]2004.

Bonneville Power Administration

Overview

Summary by Program

(accrued expenditures in thousands of dollars)

	FY 2003	FY 2004	FY 2005
CAPITAL INVESTMENTS			
Power Business Line	135,591	177,400	188,000
Transmission Business Line	318,619	386,000	268,600
Capital Equipment & Bond Premium	19,156	34,200	30,300
Total Capital Investments	473,366	597,600	486,900
Accrued expenditures will require budget obligations of . . .	473,366	597,600	486,900
Operating Expenses	2,859,568	3,080,439	3,149,561
Projects Funded in Advance	11,212	27,600	89,800
Capital Transfers (cash)	543,687	246,508	303,098
BPA Net Outlays	-462,000	-30,000	-10,000
BPA Staffing (FTE)	3,153	3,205	3,166

Summary by Program notes:

These budget estimates are subject to continual change due to changing economic and institutional conditions in the electric utility industry in the Pacific Northwest.

Net Outlay estimates are based on forecasted market conditions, current cost savings to date, and anticipated use of rate adjustment and financial management tools. Net Outlays will change throughout the rate period as BPA experiences actual market and hydro conditions and responds with management actions.

Revenues, included in the Net Outlay formulation, are calculated consistent with rate period management goals and assume a number of rate, cost and cash adjustments. Assumed adjustments include the use of a combination of tools that include Cost Recovery Adjustment Clause (CRAC) adjustments, cost re-estimates, net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation and 4(h)(10)(C) credits are also assumed.

Preface

The strategic mission of Bonneville Power Administration (Bonneville or BPA) is to meet its public responsibilities through commercially successful businesses. Bonneville provides electric power, transmission, and energy services in increasingly competitive markets. Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power for the people of the Pacific Northwest. Bonneville succeeds by satisfying its customers and enhancing the economic and environmental health of the region.

The organization of BPA's FY 2005 budget reflects Bonneville's business line basis for utility enterprise activities. Bonneville's two major areas of activity on a consolidated budget and accounting basis include Power and Transmission with administrative costs included. The Power Business Line includes line items for Fish and Wildlife, Conservation and Energy Efficiency, Residential Exchange, Associated Projects O&M Costs and Northwest Power and Conservation Council (Council).

This Overview describes Strategic Context, Mission, Benefits, Strategic Goals, and Funding by General Goal. The Annual Performance Results and Targets, Means and Strategies, and Validation and Verification sections address how the goals will be achieved and how performance will be measured. Finally, this Overview will address Program Assessment Rating Tool (PART) and Significant Program Shifts.

Strategic Context

Following publication of the Administration's National Energy Policy, the Department of Energy (Department or DOE) developed a Strategic Plan that defines its mission, four strategic goals for accomplishing that mission, and seven general goals to support the strategic goals. Each program has developed quantifiable goals to support the general goals. Thus, the "goal cascade" is the following:

Department Mission – Strategic Goal (25 yrs) – General Goal (10-15 yrs) – Program Goal (GPRA Unit) (10-15 yrs)

To provide a concrete link between budget, performance, and reporting, the Department developed a "GPRA^a unit" concept. Within DOE, a GPRA unit defines a major activity or group of activities that support the core mission and aligns resources with specific goals. Each GPRA unit has completed or will complete a Program Assessment Rating Tool (PART). A unique program goal was developed for each GPRA unit. A numbering scheme has been established for tracking performance and reporting^b.

The goal cascade accomplishes two things. First, it ties major activities for each program to successive goals and, ultimately, to DOE's mission. This helps ensure the Department focuses its resources on fulfilling its mission. Second, the cascade allows DOE to track progress against quantifiable goals and to tie resources to each goal at any level in the cascade. Thus, the cascade facilitates the integration of budget and performance information in support of the GPRA and the President's Management Agenda (PMA).

Mission

The strategic mission of Bonneville is to meet its public responsibilities through commercially successful businesses. Bonneville provides electric power, transmission, and energy services in increasingly competitive markets. Bonneville's success in the marketplace supports the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable

^a Government Performance and Results Act of 1993

^b The numbering scheme uses the following numbering convention: First 2 digits identify the General Goal (01 through 07); second two digits identify the GPRA Unit; last four digits are reserved for future use.

resources, and low-cost power for the people of the Pacific Northwest. Bonneville succeeds by satisfying its customers and enhancing the economic and environmental health of the region.

Benefits

Bonneville provides electric power (about forty-five percent of the electricity consumed in the region), transmission (about three-fourths of the region's high voltage transmission capacity), and energy efficiency throughout the Pacific Northwest, a 300,000 square mile service area. Bonneville markets the electric power produced from 31 operating Federal hydro projects in the Pacific Northwest owned by the U.S. Army Corps of Engineers (Corps) and the U.S. Department of Interior, Bureau of Reclamation (Bureau), and also acquires non-Federal power, including the power from the Columbia Generating Station, to meet the needs of its customer utilities.

Strategic Goals

The Department's Strategic Plan identifies four strategic goals (one each for defense, energy, science, and environmental aspects of the mission plus seven general goals that tie to the strategic goals). The Bonneville program supports the following goal:

Energy Strategic Goal: To protect our national and economic security by promoting a diverse supply and delivery of reliable, affordable, and environmentally sound energy.

General Goal 4, Energy Security: Improve energy security by developing technologies that foster a diverse supply of reliable, affordable and environmentally sound energy by providing for reliable delivery of energy, guarding against energy emergencies, exploring advanced technologies that make a fundamental improvement in our mix of energy options, and improving energy efficiency.

Bonneville has one Program Goal that contributes to the General Goals in the "goal cascade". This goal is Market and Deliver Federal Power:

Program Goal 04.54.00.00: Market and Deliver Federal Power: Customers receive the benefits of Federal power that produce sufficient revenues to repay the American taxpayers' investments allocated to power.

Contribution to General Goal 4:

Bonneville contributes to this goal through its following strategic business objectives: 1) Achieve high and continually improving customer satisfaction; 2) Increase the value of our business and share the expanded benefits; 3) Be a low-cost provider of power and transmission services in the region; 4) Achieve and maintain financial integrity; 5) Keep the system safe and reliable; 6) Invest in results to enhance the region's natural environment; and 7) Transform Bonneville into a diverse, employee-centered, high-performing, business-oriented organization.

Funding by General Goal

(Accrued Expenditures)

(dollars in thousands)					
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
General Goal 4, Energy Security					
Program Goal 04.54.00.00					
Bonneville Power Administration					
CAPITAL INVESTMENTS					
Power Business Line	135,591	177,400	188,000	+10,600	+6.0%
Transmission Business Line	318,619	386,000	268,600	-117,400	-30.4%
Capital Equipment & Bond Premium	19,156	34,200	30,300	-3,900	-11.4%
Total Capital Investments	473,366	579,600	486,900	-110,700	-18.5%
Accrued expenditures will require budget obligations of	473,366	597,600	486,900	-110,700	-18.5%
Operating Expenses	2,859,568	3,080,439	3,149,561	+69,122	+2.2%
Projects Funded in Advance	11,212	27,600	89,800	+62,200	+225.4%
Capital Transfers (cash)	543,687	246,508	303,098	+56,590	+23.0%
Net Outlays	-462,000	-30,000	-10,000	+20,000	+66.7%
BPA Staffing (FTE)	3,153	3,205	3,166	-39	-1.2%

Funding by General Goal Notes:

These budget estimates are subject to continual change due to changing economic and institutional conditions in the electric utility industry in the Pacific Northwest.

Net Outlay estimates are based on forecasted market conditions, current cost savings to date, and anticipated use of rate adjustment and financial management tools. Net Outlays will change throughout the rate period as BPA experiences actual market and hydro conditions and responds with management actions.

Revenues, included in the Net Outlay formulation, are calculated consistent with rate period management goals and assume a number of rate, cost and cash adjustments. Assumed adjustments include the use of a combination of tools that include CRAC adjustments, cost re-estimates, net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Adjustments for depreciation and 4(h)(10)(C) credits are also assumed.

Annual Performance Results and Targets

Bonneville Power Administration

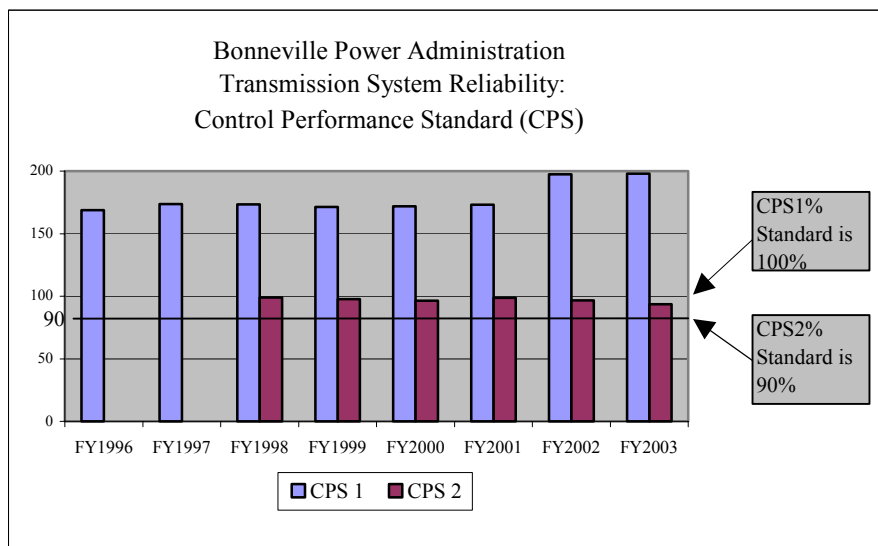
FY 2000 Results	FY 2001 Results	FY 2002 Results	FY 2003 Results	FY 2004 Targets	FY 2005 Targets
Transmission System Reliability Performance: Met Goal Actual: CPS1: 172.3% CPS2: 96.4%	Transmission System Reliability Performance: Met Goal Actual: CPS1: 173.1% CPS2: 98.7%	Transmission System Reliability Performance: Met Goal Actual: CPS1: 197.5% CPS2: 96.8%	Transmission System Reliability Performance: Met Goal Actual: CPS1: 198.0% CPS2: 93.6%	Receive monthly control compliance ratings that meet or exceed the Control Performance Standard (CPS) 1 and 2 established by the NERC.	Receive monthly control compliance ratings that meet or exceed the Control Performance Standard (CPS) 1 and 2 established by the NERC.
Repayment of Federal Power Investment: Met Goal Actual: \$316 million	Repayment of Federal Power Investment: Met Goal Actual: \$237 million	Repayment of Federal Power Investment: Met Goal Actual: \$505 million	Repayment of Federal Power Investment: Met Goal Actual: \$544 million	Meet planned annual repayment of principal on Federal power investments.	Meet planned annual repayment of principal on Federal power investments.
Recordable Injury Frequency Rate: Met Goal Actual: 2.1 injuries	Recordable Injury Frequency Rate: Met Goal Actual: 2.0 injuries	Recordable Injury Frequency Rate: Met Goal Actual: 1.7 injuries	Recordable Injury Frequency Rate: Met Goal Actual: 2.6 injuries	Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower.	Achieve a safety performance of a 3.3 recordable accident frequency rate for recordable injuries per 200,000 hours worked or the Bureau of Labor and Statistics' industry rate, whichever is lower.

Transmission System Reliability Performance Indicator

This indicator defines a standard of minimum monthly control performance as established by the North American Electric Reliability Council (NERC). Each control area is to have the best operation above the minimum monthly control compliance ratings that can be achieved within the bounds of reasonable economic and physical limitations. Each control area shall monitor its control performance on a continuous basis against two standards, CPS1 and CPS2.

CPS1 and CPS2 are the performance rating indicators that U.S. and Canadian electric utilities have developed to help assure the reliability of the North American high voltage distribution system for the benefit of the public. These measurers are intended to indicate whether or not electric utility systems are being operated within acceptable operating parameters. CPS1 helps assure generation and load balance and also measures support system frequency. CPS2 helps limit any imbalance magnitude to acceptable levels.

In FY 2003, Bonneville exceeded the minimum compliance level required by NERC with a CPS1 of 198.0% and a CPS2 of 93.6%.



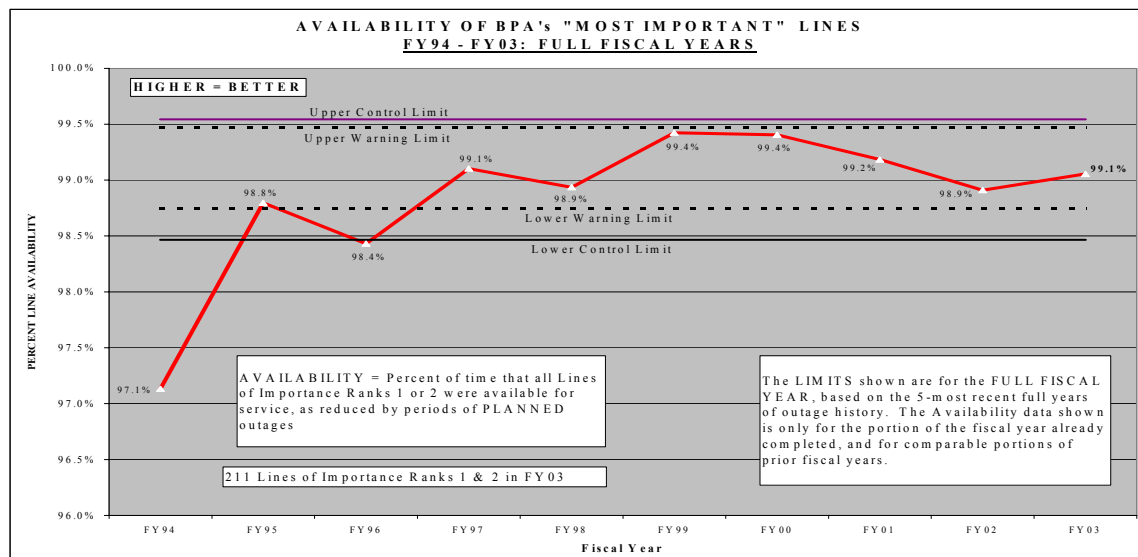
Transmission System Availability Performance Indicator

In response to the President's management initiatives and emphasis on performance measures, BPA has added a fourth measure to the agency's annual performance results and targets. This indicator helps ensure that high availability is maintained on the system's "most important" lines throughout the year. Bonneville management uses indicator results to schedule planned outages to more efficiently utilize line availability to meet load requirements. This indicator supports Bonneville's fifth Strategic Business Objective to keep the system safe, reliable and available.

Bonneville's "most important" lines are defined as those with a Line Importance Rank of 1 or 2. Control-chart techniques are used to determine the "natural range" of variability in line availability for these lines. Actual availability is then compared with warning limits and control

limits derived from that historical performance. For the purpose of this measure, availability is reduced only by planned outages, so this measure assesses the rate at which planned outages reduce availability for the most important lines on the system.

In FY 2003 Bonneville's transmission line availability for its most important lines was 99.1%, well within control chart limits.

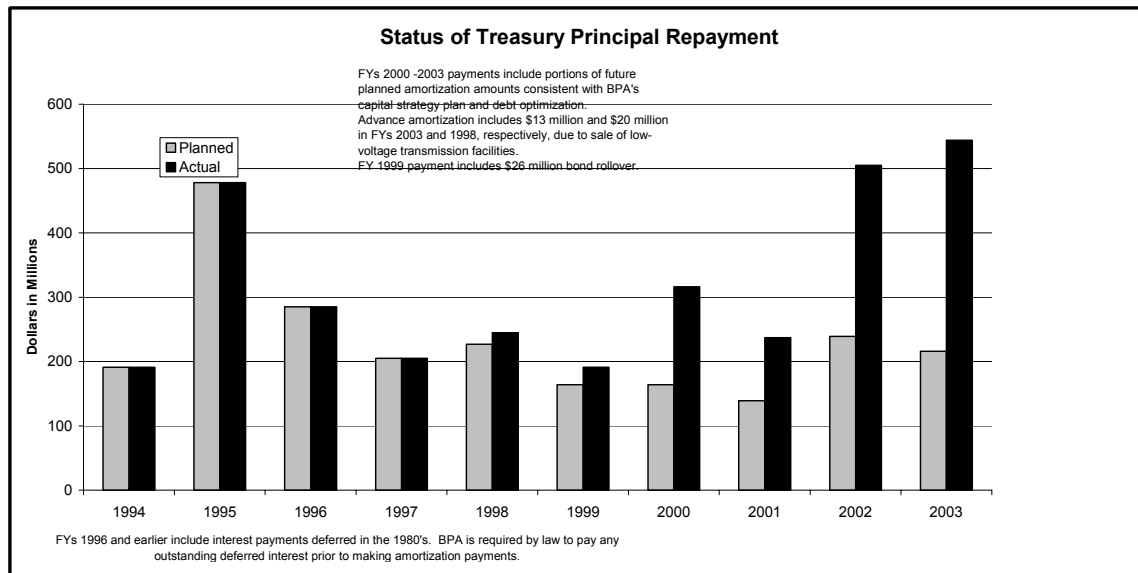


Repayment of Federal Power Investment Performance Indicator

This indicator measures the variance of actual from planned principal payments to the U.S. Treasury (Treasury). The indicator will be zero if the actual payment is equal to the planned payment.

Treasury payment outyear estimates for planned amortization are based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and accelerated amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings, resulting in a balance of advance repayment.

The following chart displays principal repayment only.



Recordable Injury Frequency Rate Performance Indicator

This indicator measures the recordable accident frequency rate by first multiplying the number of recordable injuries by 200,000. This number is then divided by the total hours worked. The Power Marketing Administrations measure their performance against a Bureau of Labor and Statistics standard industry case rate.

The national average recordable injury frequency rate is based on Bureau of Labor and Statistics. The Bureau of Labor's data is collected from organizations representing the private sector in the generation, transmission, and distribution of electric energy. The Bureau of Labor and Statistics includes a 2002 national average recordable injury frequency rate of 3.7 injuries per 200,000 hours worked. Bonneville's recordable injury frequency rate for FY 2003 was 2.6 injuries.

Means and Strategies

Bonneville provides electric power, transmission, and energy services while supporting the achievement of its vital responsibilities for fish and wildlife, energy conservation, renewable resources, and low-cost power in the Pacific Northwest.

To improve system adequacy, reliability and availability, BPA has embarked on major transmission infrastructure projects to shore up the region's transmission system and to help meet the region's future power needs. These projects are meant to address multiple challenges, such as the need to relieve the growing number of congested transmission paths, the pressure to keep up with growing energy demands, and the need to meet FERC's open access policy in support of competitive markets.

As part of these initiatives, Bonneville is also working to improve efficiencies and initiate cost reductions. Bonneville coordinates its power operational activities with the Corps, the Bureau, the North American Electric Reliability Council, regional electric reliability councils, its

customers, and other stakeholders to provide the most efficient use of Federal assets. Ongoing work with the Corps and Bureau is focused on improving the reliability of the Federal Columbia River Power System (FCRPS), increasing its generation efficiency and optimization of hydro facility operation.

Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. BPA works closely with the Northwest Power and Conservation Council, regional fisheries managers, the U.S. Fish and Wildlife Service, the Corps and Bureau, as well as other federal agencies to prioritize and manage fish and wildlife program projects.

Bonneville initiatives are impacted by external factors such as continually changing economic and institutional conditions in the electric utility industry, competitive dynamics and the continued restructuring of the electric industry.

Private and public sector partners have been and continue to be an important part of BPA's collaborative efforts to promote and foster efficient use of energy. BPA has initiated efforts to explore non-federal financial participation in its transmission infrastructure projects with transmission customers and others in the region. In addition, BPA's Conservation Augmentation and its Conservation and Renewables Discount programs offer several ways for customers to participate in regional conservation.

As part of its annual planning process, Bonneville is currently re-examining its overall business strategy for how it conducts business and delivers public benefits in order to address the challenges of the changing marketplace and growing business risks. In addition, BPA will examine industry benchmarking techniques and development of associated efficiency measures.

Validation and Verification

To validate and verify program performance, Bonneville conducts various internal and external reviews and audits. Bonneville's programmatic activities are subject to review by Congress, the General Accounting Office, the Department's Inspector General, and other governmental entities. Bonneville accounts are reviewed annually by an independent outside auditor. In addition, BPA uses Institute of Electrical and Electronics Engineers standard measures to monitor and evaluate system reliability performance, and participates yearly in an independent reliability benchmarking study.

Program Assessment Rating Tool (PART)

The DOE implemented a tool to evaluate selected programs. PART was developed by the Office of Management and Budget (OMB) to provide a standardized way to assess the effectiveness of the federal government's portfolio of programs. The structured framework of the PART provides a means through which programs can assess their activities differently than through traditional reviews. The current focus is to establish outcome- and output-oriented goals, the successful completion of which will lead to benefits to the public, such as increased national security and energy security, and improved environmental conditions. DOE has

incorporated feedback from OMB into the FY 2005 budget submission, and will take the necessary steps to continue to improve performance.

In the 2004 PART review by OMB, Bonneville received high scores of 89 and 100 in the Planning and Management sections. These high scores reflect Bonneville's strong program management system and internal and external program and management reviews. Bonneville's somewhat lower scores in the Purpose and Results sections were attributed in part to its rate setting processes and the need for improved performance measures. Recent enactment of BPA's Safety Net Cost Recovery Adjustment Rate is an example of how BPA is working to continuously improve its rates processes. This rate adjustment helped BPA establish its rates with a Treasury payment probability at a targeted 80 percent for the FY 2004-2006 period. Additionally, BPA's FY 2003 Treasury payment marks the 20th year that BPA has made its payment on time and in full. Regarding PART feedback on performance measurement, BPA is currently re-examining its overall strategy and associated performance measures and improving its linkage between financial performance and strategy. In addition, BPA will examine industry benchmarking techniques and development of associated efficiency measures and targets, both short and long term. With respect to the marketing and cost recovery findings, BPA completed a Lessons Learned Report to the Administrator as well as a similar Report to the Region that assessed its recent financial challenges and included recommendations in part to assure cost recovery and added efficiencies. Implementation of the Lessons Learned Report recommendations from both reports is currently underway.

Significant Program Shifts

Bonneville is the DOE's electric Power Marketing Administration for the Federal Columbia River Power System (FCRPS). Bonneville provides electric power, transmission and energy efficiency throughout the Pacific Northwest. Created in 1937 to market and transmit the power produced by the Bonneville Dam on the Columbia River, Congress has since then directed Bonneville to sell at wholesale the electrical power produced from 31 operating Federal hydro projects and to acquire non-Federal power and conservation resources sufficient to meet the needs of Bonneville's customer utilities. Bonneville serves a 300,000 square mile area including Oregon, Washington, Idaho, Western Montana, and parts of Northern California, Nevada, Utah and Wyoming.

The Bonneville Project Act of 1937 provided the foundation for Bonneville's statutory utility responsibilities and authorities. In 1974, passage of the Federal Columbia River Transmission System Act (Transmission System Act) placed Bonneville under provisions of the Government Corporation Control Act (31 U.S.C. 9101-9110). The Legislation provided Bonneville with "self-financing" authority and established the Bonneville Fund, a revolving fund, allowing Bonneville to use its revenues from electric ratepayers to directly fund all programs and to sell bonds to the Treasury to finance the region's high-voltage electric transmission system requirements. In 1980, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) expanded Bonneville's utility obligations and responsibilities to encourage electric energy conservation, develop renewable energy resources, and protect, mitigate and enhance the fish and wildlife of the Columbia River and its tributaries. In support of these responsibilities, Bonneville's Treasury borrowing authority was expanded to allow the sale of bonds to finance conservation and other resources and to carry out fish and wildlife capital improvements. The Northwest Power Act also required regional

energy plans and programs and created the Northwest Power Planning Council, now called the Northwest Power and Conservation Council (Council).

Bonneville's program is mandatory and nondiscretionary. As such, Bonneville is "self-financed" by the ratepayers of the Pacific Northwest and receives no annual appropriations from Congress. Under the Transmission System Act, Bonneville funds the expense portion of its budget and repays the Federal investment with revenues from electric power and transmission rates. Bonneville's revenues fluctuate primarily in response to market prices for fuels and stream flow variations in the Columbia River System due to weather conditions and fish recovery needs. Bonneville's permanent, indefinite statutory borrowing authority authorizes the agency to sell bonds to the Treasury up to a cumulative outstanding total of \$4.45 billion. Through FY 2003, Bonneville has returned approximately \$19.4 billion to the Treasury for payment of FCRPS O&M and other costs (about \$2.9 billion), interest (about \$10.6 billion), and amortization (about \$5.9 billion) of appropriations and bonds. Bonneville made its full FY 2003 payment of \$1,057 million, including \$315 million in accelerated amortization. Total FY 2003 credits for fish were about \$175 million including Fish Cost Contingency Fund credits of \$78.7 million. For FY 2004, Bonneville plans to pay the Treasury \$770 million, of which \$247 million is to repay investment principal, \$492 million is for interest, and \$32 million is for other payments including \$31 million for Pension and Post-retirement Benefits. FY 2004 4(h)(10)(C) credits are estimated at \$77 million. The FY 2005 Treasury payment is currently estimated at \$851 million.

Treasury payment outyear estimates for interest levels are based on rate case estimates updated for revised capital investment plans. Amortization is based on rate case estimates when available and planned amortization for future rate case periods. These estimates may change due to revised capital investment plans, actual Treasury borrowing, and accelerated amortization payments. In recent years, BPA has made amortization payments in excess of those scheduled in its FERC-approved rate filings resulting in a balance of advance repayment. The cumulative amount of advance amortization payments as of the end of FY 2003 is \$800.4 million.

Starting in FY 1997, Bonneville began direct funding the Bureau's Pacific Northwest power O&M costs and in FY 1999 began direct funding Corps Pacific Northwest power O&M costs. Bonneville began direct funding the U.S. Fish and Wildlife Service (USFWS) in FY 2001 to pay for O&M costs of the Lower Snake River Compensation Plan facilities. Bonneville's direct funding arrangement includes a portion of power O&M capital investments, and per its authority, Bonneville plans to direct fund Bureau hydropower research expenses of benefit to the FCRPS. Direct funded capital costs, previously funded through appropriations, are now being paid through BPA borrowing from the U.S. Treasury. BPA's total O&M direct funding was \$208 million in FY 2003.

This FY 2005 budget proposes Bonneville accrued expenditures of \$3,149 million for operating expenses, \$90 million for Projects Funded in Advance, \$487 million for capital investments, and \$303 million for capital transfers in FY 2005. The budget has been prepared on the basis of Bonneville's major areas of activity, Power and Transmission. This structure supports Bonneville's competitiveness in the increasingly deregulated wholesale electric energy market. This industry deregulation stems largely from the 1992 Energy Policy Act and ensuing FERC Orders 888 and 889 requiring separation of utilities power and transmission

functions. As a Federal agency, Bonneville is not subject to FERC's jurisdiction, but chooses to comply with the FERC orders because it views compliance as essential to successfully compete in the current and future electric power market. Further, Bonneville supports DOE's October 1995 "Power Marketing Administration Open Access Policy" which states the Power Marketing Administrations' commitment to offer transmission services to eligible entities in a manner comparable to the services offered by FERC-jurisdictional transmission providers to the extent not otherwise prohibited by law.

Spending levels in this budget are still subject to change to accommodate competitive dynamics in the region's energy markets, debt optimization strategies, and the continued restructuring of the electric industry.

- Bonneville's FY 2005 budget reflects the significant financial and business events that have shaped Bonneville's response to the physical and competitive pressures of the region's electricity situation. BPA is striving to enhance its competitive, cost-effective delivery of business-line utility products and services and continued delivery of the public benefits of its operations, while ensuring its ability to make its payments to the Treasury on time and in full.
- The last several years have been particularly challenging with Bonneville drawing heavily on its financial reserves. Bonneville, in October 2002, had a forecasted financial gap between power revenues and power expenses estimated at \$1.2 billion over the power rate period FY 2002 through FY 2006. That forecast was based on no reduction in costs, no use of the power rate adjustment clauses for FY 2004 through FY 2006 beyond the Load-Based Cost Recovery Clause (explained below), no use of debt optimization proceeds from refinancing Energy Northwest (ENW) debt, and no Financial Accounting Standard 133 accounting treatment of certain transactions. Bonneville's first priority has been to restore its financial balance. Through implementation of a variety of financial tools, Bonneville is working to assure full recovery of its costs by the end of the rate period in FY 2006. About \$400 million in forecasted program and internal operations expense reductions are being implemented over the power rate period. These forecasted expense reductions are reflected in this FY 2005 budget. In addition to seeking further cost reductions, other possible financial management tools, such as rate adjustment clauses, and organizational efficiency improvements, are being implemented to substantially reduce the gap between power revenues and expenses for the entire power rate period. The power rate adjustment clauses in effect through FY 2006 and Bonneville's debt optimization strategy are described more fully later in this Overview section.
- In establishing separate rate processes for the first time for the power and transmission functions, Bonneville's FY 2002 transmission and ancillary service rates were designed to be effective for FYs 2002 and 2003 rather than a five-year period. The two-year transmission rate period was designed to support the transition toward formation of a regional transmission organization (RTO). With work to develop an operational RTO continuing, BPA initiated a rate setting process for the FY 2004-2005 period. In November 2002, BPA signed a rate settlement agreement with most of its customers that provides for a 1.5 percent increase for most transmission and ancillary service rates for FYs 2004 and 2005. BPA submitted a final transmission rate proposal, consistent with the settlement

agreement, to the Federal Energy Regulatory Commission (FERC) and was granted final approval of its fiscal year 2004-2005 transmission rates and tariffs on September 23, 2003.

- For the power function, Bonneville concluded its power rate setting process for FYs 2002-2006 in May 2000 and submitted its power rate proposal to FERC. Subsequently, extremely high volatility and price uncertainty in power markets led Bonneville to reexamine its rate proposal. As a result, Bonneville made the decision to amend its power rate proposal knowing that a significant rate increase was likely.
- In June 2001, after a public process, Bonneville submitted a supplemental power rate proposal to FERC and was subsequently granted interim approval in September 2001 and final approval in July 2003. This proposal focused primarily on modifications to proposed risk mitigation measures. Bonneville and many parties to the rate case collaboratively developed the terms of the proposal. A key feature is a three-component Cost Recovery Adjustment Clause (CRAC): one component, the Load-Based (LB) CRAC tied to Bonneville's power system load, allows a rate adjustment every six months to reflect Bonneville's actual costs of purchasing power to augment the power system. A second component, the Financial-Based (FB) CRAC based on the Power Business Line's financial status, allows a one-year rate increase in any year of the five-year rate period, to restore reserve levels if end-of-year power accumulated net revenues drop below a threshold level. The third component, the Safety-Net (SN) CRAC, requires an expedited public process and approval by FERC. The SN CRAC allows Bonneville to change the parameters of the Financial-Based CRAC costs if BPA were to forecast missing a payment to the Treasury or other creditor, or actually misses such a payment. These rate adjustment mechanisms allow Bonneville to keep its base rates low for the FY 2002-2006 rate period while providing flexibility to make adjustments as needed to meet any financial shortfalls developing over the rate period. As in the original filing, the Supplemental Proposal continues to reflect implementation of Bonneville's fish and wildlife obligations while maintaining the ability to make Bonneville's planned payments to the U.S. Treasury on time and in full.
- The initial Load-Based CRACs provided an increase in FY 2002 of about 43% on average over base rates. The Load-Based CRAC declined to about 36% above base rates for the FY 2003 period. The Financial-Based CRAC triggered in October 2002 with a rate impact in FY 2003 of about 11% over base rates. With the coincident decline in the Load-Based CRAC and the increase from the Financial Based CRAC, Bonneville's total power rates for FY 2003 were slightly above the FY 2002 level (approximately 46% above base rates in FY 2003 compared to about 43% above base rates in FY 2002). Bonneville triggered the Safety-net CRAC for FY 2004 at about 10% above base rates. Therefore in total, the three CRACs together will result in rates about 45% above base rates for FY 2004, or about 1% below FY 2003 rates.
- In February 2003 the SN CRAC was triggered based on a reduced Treasury payment probability, and was followed by an initial power rate proposal calling for an overall power rate increase estimated at about 15 percent over FY 2003 rates. Since the initial SN CRAC trigger in February 2003, Bonneville's near-term financial condition improved due to improved hydro conditions, better market prices, additional expense reductions, contract

termination savings, and cash flow improvements. Consequently, Bonneville's final SN CRAC Record of Decision, submitted in June 2003 to FERC for review and approval, describes an average 5 percent increase over FY 2003 rates. The proposal remains under review by FERC. A subsequent calculation made in December 2003 resulted in an overall decrease of about 1% below FY 2003 rates. In anticipation of changing market conditions and the potential for improvement or worsening of Bonneville's financial condition over the rate period, the rate proposal provides Bonneville with the ability to re-trigger the SN CRAC and also provides a rebate mechanism to mitigate the rate impact on Northwest ratepayers if needed.

- Through significant additional cost cutting and deferrals since the beginning of FY 2003 and implementation of the SN CRAC, Bonneville has retained a high probability of making its Treasury payment throughout the remaining FY 2004-2006 rate period and has significantly reduced the power net revenue gap to about \$200 million. Bonneville believes that its rates will continue to be lower than the cost of new natural gas fired generation when shaped to serve load similar to the shaping ability of the Federal System. Bonneville has conducted a review and has concluded that its rates are likely to remain competitive now and in the future.
- Bonneville is continuing efforts to help meet the region's long-term power and transmission infrastructure needs. Bonneville is planning infrastructure investments in the Pacific Northwest to meet Northwest transmission needs that will also continue a competitive wholesale market in the Western Interconnection that encompasses 15 western states, 2 Canadian provinces and 2 Mexican states.
- Bonneville has identified a number of actions that it is taking or could take over the next several years to provide additional electrical infrastructure relief. These actions include federal hydro generation efficiencies and additions, additional renewable resource generation and conservation efforts, long and short-term power purchases and construction of transmission projects that reinforce the grid and integrate new generation. As part of these efforts, Bonneville has designed a process to review and prioritize the investments. Part of this process, developed with stakeholder input, will provide investor-owned utilities and public utilities an opportunity to evaluate proposed major transmission infrastructure additions for their cost, benefits, and their contribution to reliability, as well as schedules for project completions. Bonneville has moved this process to the Transmission Planning Committee of the Northwest Power Pool, which will provide a broader review of any proposed infrastructure project. Bonneville will also engage DOE and other regional stakeholders in discussions to clarify needed generation improvements and conservation.
- Bonneville received an additional \$700 million in available Treasury financing through the FY 2003 Appropriations Act to help assure a sufficient level of infrastructure planning over the next decade. In utilizing this newly available Treasury financing, BPA will encourage private-sector or other non-federal financing or joint financing of transmission line expansions and additions, develop a five-year investment plan with the participation of the regional Infrastructure Technical Review Committee or its successor in the region, use funds only for authorized purposes, include the proposed use of the funds in its annual budget submissions and select projects based on cost effectiveness criteria for achieving the

objective. The new law increases to \$4.45 billion the aggregate amount of bonds Bonneville is authorized to sell to the U.S. Treasury and have outstanding at any one time. Bonneville is pursuing other strategies to sustain funding for its infrastructure investment requirements. These additional strategies include optimization of Energy Northwest debt, revenue financing of some amount of transmission investments, and seeking when possible third party financing sources.

- Bonneville is continuing efforts to explore non-federal funding in its transmission infrastructure projects with transmission customers and others in the region. This effort has been designed to obtain as much interest as is possible in cost effective and timely non-federal participation and financing of transmission infrastructure that can be operated and maintained integrally with the Federal grid. A set of principles for non-federal financial participation was developed by Bonneville and publicly announced in OASIS (Open Access Same-Time Information System)/Federal Register postings in early 2002. That posting initiated a formal schedule for soliciting interest in non-federal participation. The schedule is sufficiently flexible to accommodate the level of interest expressed and the schedule of individual transmission projects. The Schultz-Wautoma 500kV transmission project in this FY 2005 budget is included under Capital Investments with Treasury financing assumed in order to assure funding availability; however, BPA hopes to fund this project through non-federal financing later this year.
- Consistent with scorekeeping procedures developed under the Budget Enforcement Act of 1990, some agency lease-purchase transactions constitute a form of federal agency debt for budget purposes. This reflects the fact that these long-term transactions result in liabilities that make a claim on future agency resources similar to a traditional loan transaction. At the time the Budget was being printed, BPA was considering whether it would enter into such a lease-purchase transaction. BPA's debt to the U.S. Treasury is currently limited by statute. To ensure the integrity and usefulness of this limitation, the Administration is considering proposing legislation calling for certain nontraditional financing transactions that are entered into after the date the legislation is enacted and that are similar to debt-like transactions to be treated as debt and counted toward BPA's statutory debt limit. This legislative proposal will be fully vetted with BPA stakeholders.
- This FY 2005 budget includes capital and expense estimates for the Power Business Line based on the SN CRAC rate proposal process. The Transmission Business Line (TBL) capital and expense estimates are based on the TBL rate settlement agreement and final 2004 transmission rate proposal. Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget also reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2003 costs are based on Bonneville's audited actual financial results.
- Revenue estimates in this budget, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, for example, upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service

refinancing strategies and/or short-term financial tools to manage net revenues and cash.

- Revenue adjustments for depreciation and fish credits are also assumed. These credits offset BPA's fish and wildlife program costs allocable to the non-power project purposes of the FCRPS, consistent with the Northwest Power Act. Estimates in this FY 2005 budget for 4(h)(10)(C) are \$67 million and \$66 million for FYs 2004 and 2005. Fish Cost Contingency Fund credits of \$79 million are included for FY 2003. Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that along with actual market conditions will impact revenues and expenses. Total FY 2003 credits for fish were about \$175 million including Fish Cost Contingency Fund credits of \$78.7 million.
- Bonneville is continuing to participate in the development of a regional transmission organization called RTO West in response to FERC's Order 2000 and consistent with the Administration's support for competitive wholesale energy markets. Bonneville is working closely with the region's investor-owned utilities, Bonneville's public agency customers, as well as other stakeholders through a public collaborative process called the Regional Representatives Group (RRG) to design a regional proposal that addresses the specific needs and opportunities of the Pacific Northwest. A recent proposal that has broad regional support includes the creation of a regional transmission organization that is independent of market interests. At its core is a flexible business model providing for a staged, voluntary implementation process and a governance structure that provides for a set of check and balances to ensure the region has a hand in shaping how the entity serves the region's needs. BPA plans to maintain its current level of resources and budget for these activities in FY 2005.
- Bonneville efforts to keep its rates as low as possible are augmented by the implementation of the Bonneville Appropriations Refinancing Act (part of the Omnibus Consolidated Rescissions and Appropriations Act of 1996) that refinanced Bonneville's outstanding repayment obligations on appropriations. The legislation called for increasing low interest rates on historic appropriations to current Treasury market rates and resetting (reducing) the principal of FCRPS appropriations unpaid as of the end of FY 1996. New principal amounts were established as of the beginning of FY 1997, at the present value of the principal and annual interest payments Bonneville would make to the Treasury for these obligations in the absence of the Act, plus \$100 million. The new principal amounts were then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligation on appropriations at the end of FY 1996 was \$6.7 billion, with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion, with a weighted average interest rate of 7.1 percent. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the refinancing to Treasury for their review and approval. Treasury approved the implementation transactions in July 1997.
- Consistent with assumptions for the power rate case and this FY 2005 budget, Bonneville has reached a settlement of the Residential Exchange Program for regional utilities for the post-2001 period. Regional utilities were eligible to participate in the Residential

Exchange Program beginning in 2001, except for the nine public agency utilities that previously executed settlement agreements for terms extending through June 30, 2011. To settle the Residential Exchange, Investor Owned Utility (IOU) customers will receive 1,900 average MW (aMW) in power and financial benefits, at prices generally equivalent to the priority firm power rate, over the FY 2002-2006 rate period. In FY 2007 the total amount of settlement benefits changes to 2200 aMW. No settlement offer was made to Bonneville's preference customers, or public agency utilities, because none had forecasted average system costs that were sufficiently high to qualify for Residential Exchange benefits. See the Operating Expenses- Power Business Line section for additional discussion of the settlement agreements.

- In April 2003, Bonneville entered into a settlement agreement with Enron Corporation (Enron) relating to its associated power sales and purchase agreements. This agreement followed Enron's filing for bankruptcy protection in December 2001 and was approved in advance by the Enron Bankruptcy Court, the U.S. District Court for the Southern District of New York in March 2003. Under the settlement, a \$99 million payment to Enron was paid directly from the U.S. Treasury's (Treasury) judgment fund in June 2003. The agreement calls for Bonneville to fully reimburse the Treasury by the end of December 2006 for the judgment funds used plus interest. Consistent with a Memorandum of Understanding with the Treasury, Bonneville makes interest payments on the outstanding debt to the Treasury's "miscellaneous receipts" account.
- Bonneville also implemented a load reduction strategy in 2001. This strategy was designed to help bridge the gap between the amount of load on the system and the amount of power purchases required to meet that load in a way that would minimize the cost, given that spot market prices at that time ranged as high as \$1,000/MWh. Bonneville, with help from all customer groups, was successful in reducing its load commitments by over 2,000 aMW. These load reductions varied in length of time, from a few months to up to two years over the rate period. Two load reductions from two of the region's IOUs will last the entire 5 years of the rate period. Thus, the load reduction efforts early in the rate period were developed to help minimize Bonneville's market exposure. Bonneville now expects to have minimal, if any, market exposure for augmentation purposes.
- As part of its continuing competitive efforts, Bonneville is working to further optimize debt service costs. Bonneville has reached agreement with ENW to pursue refinancing of certain Energy Northwest bonds. Bonneville pays the debt service on these bonds under the terms of earlier net billing agreements. A component of the refinancing strategy will be to extend the final maturity on the Columbia Generating Station (formerly WNP-2) debt. In addition, for Projects 1 and 3, some debt currently maturing prior to FY 2012 will be extended into the 2013-2018 time period. Bonneville has committed to Energy Northwest to use the reductions in debt service resulting from this extension to amortize Federal debt earlier than currently scheduled, except in the case of an extreme financial emergency. Implementation of the refinancing components will be subject to favorable market conditions and interest rate environment. Thus only the Federal amortization due to actual debt service savings of debt service refinancings are included in cost estimates for this FY 2005 budget.

- As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has seen an increase in Full-Time Employee (FTE) levels since FY 2000. This increase is expected to peak in FY 2004 and decline after that through FY 2006. The decline in FTE through FY 2006, the end of the current power rate period is planned to occur through attrition and is due primarily to the stringent cost reductions needed to restore Bonneville's financial health. Bonneville does not believe this reduced FTE level is sustainable over the long term and is projecting FTE levels of 3,204 following FY 2006. Bonneville FTE projections for FYs 2004 and 2005 are 3,205 and 3,166, respectively.
- Bonneville is committed to continue funding its share of the region's efforts to recover listed Columbia Basin fish and wildlife. In its 2002 Power Rate Proposal for FYs 2002-2006, Bonneville incorporated fish and wildlife funding principles that were developed and supported by a broad base of regional interests. Consistent with these principles, rates were set to provide sufficient revenue to satisfy Bonneville's fish and wildlife responsibilities. In its SN CRAC-03 rate proposal, filed with FERC in June 2003, BPA included forecasts of fish and wildlife program costs at the average of the range established in the 2002 Proposal. Bonneville is working closely with the Northwest Power and Conservation Council (Council), regional fisheries managers, National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries), the United States Fish & Wildlife Service (USFWS), U.S. Army Corps of Engineers (Corps), U.S. Bureau of Reclamation (Bureau), and other federal agencies to prioritize and manage fish and wildlife costs to remain within the funding estimates established in rates. Included with the budget schedules section of this budget document is the current tabulation of the history of Bonneville's fish and wildlife costs.
- To the extent possible, Bonneville is integrating its implementation of Endangered Species Act (ESA) actions with the Council's Fish and Wildlife Program. Many of the actions in the FCRPS Biological Opinions and the Council's Program overlap, particularly in the areas of habitat, hatchery and harvest offsite mitigation measures. The Action Agencies' (Corps, Bureau, and Bonneville) FCRPS Biological Opinion Implementation Plans describe an approach that maximizes the use of the Council's regional processes to identify and select projects that avoid jeopardizing the survival of the ESA-listed species and to protect, mitigate and enhance all fish and wildlife; both listed and non-listed, affected by the operation of the FCRPS. The Provincial Review process, sponsored by the Council, provides the mechanism for integrating activities under the existing Fish and Wildlife Program with the measures focusing on ESA-listed fish stocks in the NOAA Fisheries and USFWS Biological Opinions.
- Bonneville and the other Action Agencies will continue to prioritize funding for fish and wildlife projects, including biological opinion implementation, and will focus funding on those projects that provide the most biological benefit at the least cost. General and specific criteria, including factors for selecting projects focused on targeted stocks, will be further refined as Bonneville and the region gain experience with the Provincial Review processes.
- Bonneville is also relying on the Council's upcoming sub-basin plans to further integrate needs identified through recovery planning with those of the council's Fish and Wildlife

Program and FCRPS Biological Opinion implementation. Bonneville recently entered into a two-year contract with the Council for development of sub-basin plans for the entire Columbia River Basin. The plans will be developed in close coordination with NOAA Fisheries and the USFWS to ensure the integration and prioritization of ESA-focused project activities in the Planning Council's Fish and Wildlife Program. The sub-basin plans are expected to further inform the selection of projects received under the Provincial Reviews.

- The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Council's fish and wildlife program." And, ". . . in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." Consequently, projects funded under Bonneville's direct program will be reviewed and prioritized as part of the Council initiative process.

President's Management Agenda

- In the area of the President's Management Agenda, Bonneville is leveraging the President's initiatives to achieve efficiencies while preserving the long-term value of the FCRPS. To ensure that Bonneville is able to fully leverage the initiatives, Bonneville has consolidated the implementation plan and created four cross-agency teams in the areas of Improving Financial Management, Integrating Budget and Performance, Human Capital, and Expanding E-Government. The teams report directly to the Deputy Administrator and, using the OMB and Office of Personnel Management (OPM) "Proud to Be" standards, have mapped Bonneville's current status, are developing strategies to close existing gaps and achieve greater efficiencies in Bonneville programs and operations.
- Bonneville is self-reporting its Current Status as "green" or successful on both the Financial Management and the Integrating Budget and Performance initiatives. Over the past several years, Bonneville has streamlined and integrated its strategic planning and budgeting processes, setting quantifiable outcome goals and targets, aligning its resource allocations in context of past results, and implementing the Balanced Scorecard concept of performance management. As part of this process, Bonneville executives develop Agency Strategic Business Objectives and Strategic Thrusts that formulate policy direction, establish annual performance targets, and set Agency financial targets. Bonneville has received a Clean Audit Opinion since the mid-1980s and has no material financial weaknesses reported on its financial statements. Bonneville planning and budgeting processes include extensive Bonneville stakeholder involvement, including customers, constituents, tribal and other interested parties in the region. Bonneville's financial management systems and reporting procedures meet federal standards, comply with generally accepted accounting principles and are consistent with Presidential Initiative schedule guidance.

- In the area of Expanding E-Government, Bonneville is self-reporting its Current Status as “red” and its Progress Toward Implementing the President’s Management Agenda as “yellow.” In an effort to close the gap in the standard of IT (Information Technology) program management (90 percent of IT projects on time and on budget), Bonneville has also completed an IT Leading Change effort (IT Process Re-engineering Study) and is now implementing a standard IT project management approach, increased rigor for approving and funding IT projects, as well as enhanced IT documentation and reporting processes. Bonneville exceeds OMB standards for IT business case preparation and for providing web access that improves citizen access by offering one-stop shopping through integrated delivery methods while reducing undue burden on our business partners and customers by reducing or eliminating the need to re-key data. Bonneville has developed an Enterprise Resource Planning system that integrates its major business process, providing its managers and employees with access to timely and accurate financial, personnel, and property reports. Bonneville in a move to further reduce operations cost, initiated an effort in January 2004 to consolidate its business and administrative IT groups. It is expected that this effort will be implemented by October 2004

- Bonneville is self-reporting “yellow” in Current Status and “green” in Progress Toward Implementing the President’s Management Agenda in the area of Human Capital. Bonneville is continuing its strategic focus on transforming Bonneville into a High Performing Organization with implementation of several Leadership Development initiatives. Through its Skills Gap Assessment, as an example, Bonneville has identified competency levels for all critical jobs in order to enhance its training and development and recruiting programs. Bonneville meets or exceeds the OPM Standards of Success in the areas of Strategic Alignment, successfully eliminated one-layer of management and created a frontline organization of Customer Account Executives; Strategic Competencies (Talent), developed comprehensive staffing plans for Bonneville business lines; Leadership, implemented developmental and training programs designed to prepare employees for executive responsibilities and to strengthen current managerial leadership skills; and Performance Culture (Strategic Awareness), aligned Agency Strategic Business Objectives with quantifiable targets that are embedded in individual executive and managerial performance contracts.

Overview of Detailed Justifications

Bonneville’s detailed justification summaries follow present budget requirements of budget line items on the basis of accrued expenditures. Accrued expenditure is the basis of presenting Bonneville’s program funding levels in the power and transmission rate making processes, and the basis upon which Bonneville managers control their resources to provide products and services. Accrued expenditures relate period costs to period performance. Traditional budget obligation requirements for Bonneville’s budget are shown on the Program and Financing Summary Schedule prepared in accord with OMB Circular A-11.

The organization of BPA’s FY 2005 budget and these performance summaries reflect Bonneville’s business line basis for utility enterprise activities. Bonneville’s major areas of activity on a consolidated budget and accounting basis include Power and Transmission with administrative costs included. The Power Business Line includes line items for Fish and

Wildlife, Conservation and Energy Efficiency, Residential Exchange, Associated Projects O&M Costs and Council. Environmental activities are shown in the relevant business line, and in accord with OMB Circular A-11 guidance for revolving funds, reimbursable costs are incorporated within the associated business lines. All programs funded in advance will be fully funded by benefiting entities. Bonneville's interest expenses, pension and post-retirement benefits, and capital transfers to the Treasury are shown by program.

The first section of performance summaries, Capital Investments, includes accrued expenditures for investments in electric utility and general plant associated with the FCRPS generation and transmission services, conservation and energy efficiency services, fish and wildlife, and capital equipment. These capital investments will require budget obligations and use of existing borrowing authority of \$487 million in FY 2005.

The near-term forecasted capital funding levels have undergone an extensive internal review as a result of implementation of a capital asset management strategy. This strategy encompasses prioritizing capital projects to be funded based on risk and other factors. Utilizing this review process helps Bonneville in its efforts to compete in the deregulated energy market. Bonneville will continue to work with the Corps and the Bureau to optimize the best mix of projects.

In addition to implementation of a capital asset management strategy, Bonneville has developed and is implementing an external capital investment review process that provides significant benefits to Bonneville by both improving direction on what the FCRPS invests in (tying investments more closely to agency strategy) and by improving how those investments are made (better analysis and review of capital investments and their alternatives). BPA will continue its efforts to refine and implement the revised capital investment review process to improve the value provided.

Bonneville's second section of the performance summaries, entitled Annual Operating Expenses, includes accrued expenditures for business line and program activities financed by power sales revenues and transmission services revenues and projects funded in advance. For FY 2005, budget expense obligations are estimated at \$3,149 million. The total program requirements of all Bonneville programs include estimated budget obligations of \$3,726 million in FY 2005.

Bonneville Power Administration
Funding Profile by Subprogram ^a

(dollars in thousands)

	FY 2003 Audited Actuals	FY 2004 Original ^b	FY 2004 Adjustments	FY 2004 Revised	FY 2005 Proposed
Capital Investment Obligations					
Associated Project Costs ^c	98,880	N/A	-	111,400	116,000
Fish and Wildlife	11,633	N/A	-	36,000	36,000
Conservation & Energy Efficiency ^c	25,079	N/A	-	30,000	36,000
Subtotal, Power Business Line ^d	135,591	N/A	-	177,400	188,000
Transmission Business Line ^c	318,619	NA	-	386,000	268,600
Capital Equipment & Bond Premium	19,156	N/A	-	34,200	30,300
Total, Capital Investments ^c	473,366	526,924	-	597,600	486,900
Expensed and other Obligations					
Expensed	2,859,568	3,428,588	-	3,081,000	3,150,000
Projects Funded in Advance	11,212	133,426	-	27,600	89,800
Total Obligations ^e	3,344,146	4,088,938	-	3,706,200	3,726,700
Capital Transfers (cash)	543,687	222,000	-	246,508	303,098
BPA TOTAL	3,887,833	4,310,938	-	3,952,708	4,029,798
Full-time Equivalents (FTE)	3,153	3,252	-	3,205	3,166

Public Law Authorizations include:

Bonneville Project Act of 1937, Public Law No. 75-329, H.R. 7642

Federal Columbia River Transmission Act of 1974, Public Law 93-454, S. 3362

Regional Preference Act of 1964, Public Law 88-552

Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act), Public Law 96-501, S. 885

^a BPA's FY 2005 budget has been prepared in accord with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to discretionary "cap" in the BEA. These estimates support activities that are legally separate from discretionary activities and accounts. Thus, changes to BPA estimates cannot be used to affect any other budget categories such as domestic discretionary or defense discretionary, which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a BEA "pay-as-you-go" test regarding its revision of funding estimates.

^b These estimates reflect BPA's FY 2004 Congressional Budget submission.

^c Includes infrastructure investments designed to address the long-term needs of the Northwest and to reflect significant changes affecting BPA's power and transmission markets.

^d The Power Business Line includes Fish and Wildlife, Conservation & Energy Efficiency, and Associated Project costs in the Performance Summaries.

^e Includes short-term purchase power contract estimates for meeting load requirements.

This FY 2005 budget includes capital and expense estimates for the Power Business Line based on the Safety-Net Cost Recovery Adjustment Clause rate proposal. The Transmission Business Line (TBL) capital and expense estimates are based on the TBL Rate Settlement Agreement and Final 2004 Transmission Rate Proposal. Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in the budget also reflect the significant changes affecting the West Coast power and transmission markets along with the planned infrastructure investments designed to address the long-term needs of the region.

The total FY 2003 obligations are consistent with the Program and Financing Summary in Exhibit BPA/BP-1,2,3 and 4, P and F. However, FY 2003 costs are based on BPA audited actual financial results, which have adjusted the allocation between capital and expensed obligations.

Refer to 16 U.S.C. Chapters 12B, 12G, 12H, and BPA's other organic laws, including Public Law 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

Power Business Line - Capital

Funding Schedule by Activity (Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Associated Project Costs	98,880	111,400	116,000	+4,600	+4.1%
Fish & Wildlife	11,633	36,000	36,000	0	0.0%
Conservation & Energy Efficiency	25,078	30,000	36,000	+6,000	+20.0%
Total, Power Business Line - Capital	135,591	177,400	188,000	+10,600	+6.0%

Description

Associated Project Costs provide for direct funding of additions, improvements and replacements of existing Bureau of Reclamation (Bureau), and U.S. Army Corps of Engineers (Corps) hydroelectric projects in the Pacific Northwest. The Bureau and Corps provide power production, which is marketed by Bonneville, and invest in additions, improvements, and replacements that provide for increased performance and availability of generating units.

Maintaining the availability and increasing the efficiency of the FCRPS is critical to ensuring that the region has an adequate, reliable and low-cost power system. The FCRPS represents about 80% of Bonneville's power supply, and is composed of 31 operating Federal hydro electric projects with over 200 generating units. These projects have an average age of over 45 years, with some that exceed 60 years of age. Through direct funding, and the close cooperation of the Corps and Bureau, Bonneville uses its borrowing authority to make investments needed to restore generation availability and improve efficiency, eliminating demand on Corps and Bureau appropriations for power-related investments. Since the beginning of direct funding, Bonneville has significantly improved system performance - generation availability is up to 89 percent as of last year. In 1999, at the direction of Congress, Bonneville issued a report that it soon began to implement called the "Asset Management Strategy for the FCRPS." Bonneville concluded in this report that it needed to invest nearly \$1 billion in the projects over the next 12 –15 years. Without these investments, that are focused on restoring and maintaining the reliability of the system, history indicates that unit availability may decline at a rate of about 1.5% per year. Supplementary analysis and experience with the system has revealed additional investment needs above and beyond the levels originally planned under the Asset Management Strategy for this and the next five-year rate periods.

These planned investments, included in these FY 2005 budget's funding estimates, will maintain the output of the FCRPS. Moving forward with these cost-effective opportunities to expand the generation and to preserve and enhance the capability of the Federal system is a smart economic and environmental decision when compared to purchasing power from the market to serve Pacific Northwest electricity needs.

The Fish and Wildlife program provides for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries, pursuant to Section 4(h) of the Northwest Power Act. Bonneville satisfies a major portion of its fish and wildlife responsibilities and meets the Administrator's obligation under the Northwest Power Act by funding projects and activities designed to be consistent with the Northwest Power and Conservation Council's (Council) Fish and Wildlife Program.

Bonneville is also mandated to implement measures called for under the Endangered Species Act. These measures are part of the biological opinions issued in December 2000 by the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS), to address the effects of the operation of the FCRPS on threatened and endangered salmon and Endangered Species Act-listed Kootenai River – white sturgeon and bull trout. The biological opinions require the Action Agencies (Corps, Bureau, and Bonneville) to implement actions throughout the Columbia River Basin that comprehensively address all the life stages of Endangered Species Act (ESA)-listed fish. The Action Agencies released a Final FY 2003-2007 Implementation Plan for the FCRPS on November 6, 2002, that identifies and describes the specific measures that the three agencies plan to implement in FY 2003-2007 and addresses the actions called for in the NOAA Fisheries and USFWS 2000 Biological Opinions for the FCRPS. The Implementation Plan, together with projects undertaken to address mitigation for non-listed species under the NW Power Act, form the basis for Bonneville's planned capital investment of \$36 million for FYs 2004 and 2005.

Bonneville's fish and wildlife capital program is directed at activities that increase numbers of Columbia River Basin fish and wildlife resources including projects designed to increase juvenile and adult fish passage in tributaries and at mainstream dams, and increase fish production and survival through construction of hatchery and acclimation facilities, fish monitoring facilities and land acquisitions. Funding is also included for pre-engineering design and studies for new and developing projects. Capital project funding will focus on integrating ESA-related priorities with the Council's Fish and Wildlife Program.

The FY 1997 Energy and Water Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel "to review projects proposed to be funded through that portion of Bonneville's fish and wildlife budget that implements the Planning Council's fish and wildlife program." And, "... in making its recommendations to Bonneville, the Planning Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the Independent Scientific Review Panel (ISRP) and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, and/or directly funded, by Bonneville and to make funding recommendations to Congress. The ISRP was directed to determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by April 1 of each year. The Council, in turn, must report to Congress annually by May 15.

Consistent with the principles of the Federal Caucus' *Final Basinwide Salmon Recovery Strategy* (All-H Strategy), Bonneville is implementing much of the off-site mitigation actions required by the year 2000 Biological Opinions through the Council's Fish and Wildlife Program. Under the 1980 Northwest Power Act, the Fish and Wildlife Program is tasked with protecting, mitigating and enhancing Columbia River Basin fish and wildlife affected by the development and operation of the FCRPS. The Provincial Review process, sponsored by the Council, provides the mechanism for integrating activities under the existing Fish and Wildlife Program with the measures focused on ESA-listed fish stocks in the NMFS and USFWS Biological Opinions.

When acquiring resources to meet planned future loads, the Northwest Power Act requires the Administrator to first consider and acquire resources through cost-effective conservation that the Administrator determines is consistent with the Northwest Power and Conservation Council's Power Plan to reduce loads. The Council's Power Plan specifies that Bonneville's share of the regional, cost-effective conservation target will be about 220 aMW for the current rate period (FYs 2002-06). In addition, the Council's Power Plan, currently under revision, further estimates that Bonneville's target will be another 250 to 300 aMW of conservation in the FY 2007 to 2011 period. Bonneville anticipates that between 100 and 200 aMW of this amount will be acquired under its capital conservation acquisition program.

Conservation was key to the recent effort to reduce Bonneville's power delivery obligations as a way of limiting the impact of volatile and high market prices on Bonneville's rates. Conservation is an important part of Bonneville's diverse portfolio of resources that provides a reliable approach to meeting Bonneville's load obligations.

Long-term investments in energy efficiency help buffer the FCRPS against future resource uncertainties. During periods of price volatility, conservation also helps reduce financial risk associated with relying on the market for energy purchases in the future.

Detailed Justification

(dollars in thousands)

	FY 2003	FY 2004	FY 2005
Associated Project Costs.	98,880	111,400	116,000

Work with both the Corps and the Bureau to reach mutual agreement on those capital improvement projects that need to be budgeted and scheduled, are cost-effective and provide system or site specific enhancements, increase system reliability, or provide efficiencies.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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The work is focused on improving the reliability of the FCRPS, increasing its generation efficiency through turbine runner replacements and optimization of hydro facility operation, and small capital reimbursements associated with routine maintenance activities. Also, limited investments may be made in joint use facilities that are beneficial to both the FCRPS operations and to other Corps and Bureau operations.

■ **Corps of Engineers (known projects to date):**

FY 2003: Continued work on Power System Reliability Improvements. Continued refurbishment/replacement of head gates and the gantry crane at Bonneville Dam. Continued repair work of the fish unit generator and generator rewedging at Bonneville. Continued main unit and station service breaker replacements at selected projects. Continued work on oil/water separators at Lower Snake River projects. Completed work on replacing main unit annunciation and continue work on the 480-volt distribution system and CO2 system at Chief Joseph. Completed replacement of DC power supplies at John Day and The Dalles. Selected a prototype turbine runner for McNary. Continued hydro optimization investigations system wide. Tested prototype replacement governors at several plants. Began implementation of Cougar modernization. Continued exciter replacements at John Day. Continued with turbine runner replacement at Ice Harbor, Unit #2. Continued battery system upgrade at McNary. Began replacement and upgrades on protective relays and fire protection at Lower Snake River projects, plus a variety of smaller continuing or new investments and repairs for failed units.

FY 2004: Complete work on Power System Reliability Improvements on Lower Columbia River projects and continue on Lower Snake River projects and other selected sites. Continue main unit and station service breaker replacements at selected projects. Continue work on oil/water separators at most projects. Continue hydro optimization investigations and equipment installations system wide. Continue work on governor replacements at selected projects. Continue refurbishment/replacement of head gates and gantry crane at Bonneville Dam. Continue rewedging at Bonneville. Continue with turbine runner replacement and modernization at McNary. Continue Cougar modernization. Continue exciter replacements at John Day. Continue with CO2 system installation at Chief Joseph. Continue with turbine replacements at Chief Joseph. Continue runner replacement and begin crane rehabilitation and generator rewind at Ice Harbor. Purchase replacement generator winding for Lower Granite and Detroit. Continue replacement of exciters at Lower Monumental and Lower Granite. Continue gate rehabilitation at Ice Harbor. Continue replacement and upgrades on protective relays and fire protection at Lower Snake River projects. Begin intake crane rehabilitation at The Dalles, plus a variety of smaller continuing or new investments and repairs to failed units.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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FY 2005: Complete work on Power System Reliability Improvements on Lower Snake River projects and selected other sites. Continue main unit and station service breaker replacements/improvements at selected projects. Continue work on oil/water separators at most projects. Continue hydro optimization investigations and equipment installations system wide. Continue work on governor replacements at selected projects. Continue refurbishment/replacement of head gates, finish gantry crane and continue work on gantry crane at Bonneville Dam. Begin replacement of unwatering pumps and HVAC systems at Bonneville Dam. Continue rewedging at Bonneville. Continue with turbine runner replacement and modernization at McNary. Finish Cougar modernization. Finish exciter replacements at John Day. Finish CO2 system installation at Chief Joseph. Continue with turbine replacements at Chief Joseph. Continue crane rehabilitation, runner replacement and generator rewind at Ice Harbor. Complete replacement of generator winding at Detroit. Continue with generator winding replacements for Lower Granite. Continue replacement of exciters at Lower Monumental and Lower Granite. Begin replacement of exciters at Lost Creek. Complete gate rehabilitation at Ice Harbor. Continue and/or complete replacement and upgrades on protective relays and fire protection at Lower Snake River projects. Replace heat pump at Little Goose. Purchase spare transformers for selected sites. Begin generator rewinds and other rehabilitation work at The Dalles (completion of original rehabilitation project begun by Corps using appropriations). Continue intake crane rehabilitation at The Dalles, plus a variety of smaller continuing or new investments and repairs to failed units.

■ **Bureau of Reclamation (known projects to date):**

FY 2003: Continued Grand Coulee runner replacements. Continued Grand Coulee repairs associated with station service fire including generator rewind of unit #4. Continued elevator rehabilitation at Grand Coulee. Continued breaker replacement at Grand Coulee and other projects. Began air housing cooler replacement at Grand Coulee. Continued Grand Coulee pump-generator circuit addition and transformer replacement. Began modifications to Grand Coulee Arrival Center. Began replacement of air compressors at Grand Coulee. Continued hydro optimization investigations and equipment installations at Grand Coulee. Continued with Hungry Horse and began Anderson Ranch life-safety modifications. Continued Boise Diversion modernization. Completed unit breakers at Anderson Ranch and began at Palisades. Continued with design and purchase of new turbine runner for Chandler. Began transformer replacement at Green Springs, plus a variety of smaller continuing or new investments and repairs to failed units.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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FY 2004: Continue Grand Coulee runner replacements. Complete Grand Coulee repairs associated with station service fire and finish generator rewind of unit #4. Complete elevator rehabilitation at Grand Coulee. Continue breaker replacement at Grand Coulee and other projects. Continue with air housing cooler replacement at Grand Coulee. Complete Grand Coulee pump-generator circuit addition and transformer replacement. Continue with modifications to Grand Coulee Arrival Center. Continue with replacement of air compressors at Grand Coulee. Purchase spare winding for Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Begin SCADA replacement at Grand Coulee. Continue with Hungry Horse and complete Anderson Ranch life-safety modifications. Complete Boise Diversion modernization. Continue unit breaker replacements at Palisades. Continue with turbine runner replacement for Chandler. Continue with transformer replacement at Green Springs, plus a variety of smaller continuing or new investments and repairs to failed units.

FY 2005: Continue Grand Coulee runner replacements. Continue breaker replacements at Grand Coulee. Continue with air housing cooler replacement at Grand Coulee. Continue Grand Coulee pump-generator circuit addition and transformer replacement. Complete modifications to Grand Coulee Arrival Center. Complete replacement of air compressors at Grand Coulee. Continue with SCADA replacement at Grand Coulee. Purchase spare winding for Grand Coulee. Continue hydro optimization investigations and equipment installations at Grand Coulee. Complete Hungry Horse life-safety modifications. Continue with unit breaker replacements at Palisades. Continue with turbine runner replacement for Chandler. Continue with transformer replacement at Green Springs, plus a variety of smaller continuing or new investments and repairs to failed units.

Fish and Wildlife.	11,633	36,000	36,000
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Although the regional prioritization process and independent scientific review for projects to be recommended for funding in FY 2005 is not complete, and is not expected to be completed until early in FY 2004, the following projects may be candidates for capital funding in FY 2005. It is Bonneville’s intention to proceed with design and construction of those projects from this list that are recommended for funding within the available budget. The costs indicated are preliminary estimates only and actual costs may be greater or lower than those estimates depending on final design and construction costs.

FY 2003-2004 efforts include continued implementation of high priority ESA related projects and activities associated with the FY 2000 NMFS (now NOAA Fisheries), and USFWS Biological Opinions. Projects may include a genetics analysis and education facility and a Hatchery Safety Net Program for up to ten ESA-listed salmon and steelhead populations if determined to be necessary by formulation of Hatchery Genetic Management Plans and Genetic Risk Analyses. Implementation of reforms to hatchery programs may also be warranted as information on the types of changes to these facilities are established and priorities for sequencing implementation are developed through the Council's Artificial Production Review Committee. Projects that meet the Reasonable and Prudent Measures (RPA's) and other high priority measures in the NMFS and USFWS Biological Opinions are also described in the action agencies (Corps of Engineers and Bureau of Reclamation) Annual Implementation Plan for FY 2002. Bonneville may include capitalization of investment in land acquisition for fish and wildlife, provided such costs exceed \$1 million, and such investment provides a creditable and quantifiable benefit against a defined obligation for Bonneville.

Anadromous fish supplementation, production, and/or juvenile and adult passage improvement projects that may require capital funds in FY 2005 include the following:

- Yakima River Spring Chinook Supplementation Facility, located in Cle Elum, Washington: This project includes the construction of an interpretive building for public education and for the design and construction of a monitoring and evaluation building at Nelson Springs for use by project biologists.

- Johnson Creek Summer Chinook Salmon restoration, located in the South Fork Salmon Basin of Idaho: This project may include development and construction of facilities for adult collection and holding, juvenile rearing, and acclimation. The design and construction is expected to continue.

- Upper Snake River Spring Chinook Salmon captive broodstock acclimation and adult collection facilities, to be located on the Upper Grande Ronde River near La Grande, Oregon, on Catherine Creek near Union, Oregon, and on Lostine River near Enterprise, Oregon: The design and construction is expected to continue. This project, as a measure in the Council's Fish & Wildlife Program, would also identify and develop artificial propagation facilities to protect and enhance salmon and steelhead native to the Imnaha and Walla Walla River Basins.

- Salmon Creek restoration and enhancement of anadromous fish populations and habitat in Salmon Creek: This project would provide instream flows through on-farm water conservation and water leasing, design of a river pump station, an upgrade to the Salmon Lake Feeder Canal, and design for channel restoration. A hatchery feasibility study for supplementation of currently listed salmon and steelhead populations under the ESA is under discussion with the Bureau and may be appropriate for Bonneville funding, with construction potentially funded by the Bureau.

- Walla Walla River Juvenile and Adult Passage Improvements: This project would provide safe passage for migrating juvenile and adult salmonids in the Walla Walla Basin by constructing and maintaining passage facilities at irrigation diversion dams and canals.
- Walla Walla Hatchery planning and design work.
- Continuation of acquisition and installation of Adult Pit tag monitors at selected Federal dams in Snake and lower Columbia rivers. The design and construction is expected to continue.
- Juvenile and adult PIT tag detection facilities throughout the Columbia River Basin.
- Mid-Columbia River coho restoration program. This project will continue planning and design of satellite acclimation facilities and a potential central coho production facility.
- Major irrigation diversion screening and consolidation programs in Oregon, Washington and Idaho.
- Yakima and Klickitat Rivers steelhead and coho restoration program: This project will initiate planning and conceptual design of satellite acclimation facilities and a potential central steelhead and coho production facility.
- Hood River spring chinook restoration program: This project will initiate planning and conceptual design for a central production facility and/or expansion of existing production facilities at Parkdale.
- Umatilla River Fish passage and habitat restoration pilot project (Westland-Ramos).

Land acquisitions that fulfill an identifiable and quantifiable portion of Bonneville's obligation to acquire "habitat units" to mitigate for inundation and construction related to Federal dams, and otherwise meet Bonneville's capitalization policy, will be purchased as available and prudent. Following are possible acquisitions.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Grand Coulee and Chief Joseph Wildlife Habitat Acquisition
- Couer d'Alene Fish and Wildlife Habitat Acquisition
- Albeni Falls Wildlife Mitigation.
- Blue Creek Winter Range Wildlife Habitat Acquisition
- Yakima Valley Fish and Wildlife Habitat Acquisition
- Grande Ronde Wildlife Habitat Acquisition
- Salmon River Fish Habitat Acquisition
- Montana Resident Fish Habitat Acquisitions at McWinnegar/Weaver Slough and Fisher River
- Fish and Wildlife Land Acquisition - Selah Gap to Union Gap.

Conservation and Energy Efficiency.	25,078	30,000	36,000
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The Conservation Augmentation (ConAug) program offers several ways for customers to participate in regional conservation. ConAug program components include: (1) utility programs, which include the request for Interest in Reducing Load Through Conservation (IRLC), which resulted in customer proposals to conserve energy through residential weatherization, commercial lighting and HVAC, industrial processes and lighting, and irrigated agriculture; (2) 3rd party Delivery programs, such as residential compact fluorescent lighting, "Vending Mi\$er"(a program to reduce energy use in regional refrigerated vending machines) and the Water and Waste Water Treatment Facilities program; (3) Federal programs to help Federal installations in the region reduce energy use, which includes the Federal Hatcheries program and work at various dams to help the Corps of Engineers and the Bureau of Reclamation in their efforts to reduce energy use; and (4) other initiatives still in the design stage.

Total Power Business Line – Capital	135,591	177,400	188,000
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Explanation of Funding Changes

FY 2005 vs. FY 2004 (\$000)

Associated Project Costs

- The increase reflects the original 12-year investment program outlined in the 1999 Asset Management Strategy and with consideration of inflation, maintains investment levels at a relatively constant amount. +4,600

Fish and Wildlife

- No change 0

Conservation and Energy Efficiency

- Reflects a shift of the capital funding to later in the rate period to better match the pace of actual deliveries by ConAug participants and to help with Bonneville's financial situation.. . . . +6,000

Total Funding Change, Power Business Line - Capital	<u>+10,600</u>
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Transmission Business Line – Capital

Funding Schedule by Activity

(Accrued Expenditures)

(dollars in thousands)

	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Main Grid	162,462	234,100	118,000	-116,100	-49.6%
Area & Customer Services	7,840	18,600	12,300	-6,300	-33.9%
Upgrades & Additions	79,051	53,400	64,100	+10,700	+20.0%
System Replacements	69,266	79,900	74,200	-5,700	-7.1%
Projects Funded in Advance	11,212	27,600	89,800	+62,200	+225.4%
Total, Trans Business Line - Capital	329,831	413,600	358,400	-55,200	-13.3%

Description

The Transmission Business Line (TBL) is responsible for about 75 percent of the Pacific Northwest's high-voltage transmission. TBL provides for all additions, upgrades and replacements to the Federal transmission system, resulting in reliable service to northwest industrial users and utility customers. The transmission system also facilitates the sale and exchange of power to and from the region.

TBL plans to make significant improvements and additions to the system over the next several years to assure reliable transmission in the Northwest. These improvements and additions will help the Federal transmission system continue to comply with national reliability standards, replace aging equipment, allow for interconnection of needed new generation, and remove constraints that limit economic trade or the ability to maintain the system.

TBL has built no major transmission projects since 1987. Only incremental additions have been added to the system over the years. The system continues to show signs of stress as two close calls this summer demonstrate. On June 4, 2003, voltage instability in the Spokane area was arrested by quick operator action. Two weeks later the transmission path between Montana and Idaho was overloaded for two days, and operator adjustments prevented load loss.

The eastern blackout on August 14, 2003 alerted the nation to the lack of investment in utility infrastructure. BPA had its wakeup call with the August 10, 1996 West Coast disturbance that originated in Oregon. Investment was made and practices changed to strengthen the system. The West Coast energy crisis of 2000-2001 was a second red flag that triggered the need for the BPA transmission infrastructure program to shore up the grid.

In addition, about 15,000 megawatts of generation are under consideration for siting in the Northwest. The Transmission System will become even more stressed as generation is added if nothing is done to reinforce the existing network.

The first phase of Bonneville's infrastructure addition consists of the following projects:

(G1) Puget Sound Area Additions, (G2) North of Hanford/North of John Day, (G3) West of McNary (on hold), (G4) Starbuck Generation (on hold), (G5) Lower Monumental and McNary Area Generation (Phase II) (on hold), (G6) Cross Cascades North, (G7) Celilo Modernization, (G8) I-5 Corridor Generation Additions, (G9) Spokane Area and Western Montana Generation Additions, (G10) Portland Area Additions, (G12) Olympic Peninsula Additions, (G13) I-5 Corridor Generation Additions (Southwest Washington-Northwest Oregon) (on hold pending availability of third party funding). These projects are further described below.

The benefits of these projects will include relief from congestion, as well as restoring an adequate reliability margin back into the grid. This additional margin will be used to respond to a competitive market, meet regional load during outages, move power to meet changing loads, perform maintenance without harming the market, and allow the RTO West to start without the regional grid heavily congested.

Bonneville assumes that some generators will integrate their load into the Federal transmission system. Depending on which generators build on sites in the Northwest and the project locations, between 8,000 and 12,000 MW can be integrated with the completion of the above additions and improvements. Integration into the Federal transmission system will be consistent with FERC's recent generator interconnection ruling. As a means to sustain BPA's limited Treasury financing, third-party funding partnerships are currently being pursued for some of the infrastructure additions. For example, on projects associated with generation integration, the potential generation or transmission customers are being consulted regarding funding the construction of these projects. The Schultz-Wautoma 500kV transmission project in this FY 2005 budget is included under Capital Investments with Treasury financing assumed in order to assure funding availability; however, BPA hopes to fund this project through non-federal financing later this year.

The system replacement plan is to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated and obsolete control and communications equipment; and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Bonneville will continue to fund fiber optic communications facilities needed to meet Bonneville's projected operational needs. To the extent that these investments create temporary periods of excess fiber optic capacity, such capacity can be made available to telecommunications providers and to non-profits to meet public benefit Internet access needs for rural areas and other needs in Bonneville's service area. Bonneville's investments in fiber optics, including the role of the private sector in building fiber optic networks, is consistent with the "Fiber Optic Cable Plan" submitted to Congress on May 24, 2000, accompanying the FY 2000 Energy and Water Development Appropriations Act. In accordance with this plan, when possible, Bonneville will seek partnerships with fiber optic facility and service providers to meet its needs.

Detailed Justification

(dollars in thousands)			
	FY 2003	FY 2004	FY 2005
Main Grid	162,462	234,100	118,000

Bonneville's strategic objectives for Main Grid projects are to provide voltage support; provide a reliable transmission system for open access per FERC criteria; provide for relief of transmission system congestion; and to assure compliance with the Nuclear Energy Regulatory Commission (NERC), Western Electric Coordinating Council (WECC) and BPA reliability standards. During this budgeting period, projects are planned that will provide voltage support to major load areas that are primarily west of the Cascade mountains, and to provide for transmission access for new generation projects to the load center. Minor reinforcements in the Portland, OR/Seattle, WA corridor are also planned.

- FY 2003: (1) Completed Environmental Impact Statement (EIS) and began construction of the Kangley-Echo Lake 500 KV line and substation addition at Echo Lake and the 500/230 KV transformer bank addition at SnoKing substation (G1) (Puget Sound Area Additions); (2) Began construction of the new Wautoma Substation. The Schultz-Wautoma 500 KV line construction was delayed to start in FY 2004 (G2) (North of Hanford/North of John Day); (3) Continued installation of the 500 KV series capacitor addition at Schultz Substation (G6) (Cross Cascades North); (4) Completed design and began construction of the Grand Coulee-Bell 500 KV line, construction start was delayed to FY 2004 for the 500 KV series capacitor additions at Bell and Dworshak substation, the 500 KV series capacitor and controls replacement at Garrison Substation, and the 500 KV shunt reactor addition at Grand Coulee (G9) (Spokane Area and Western Montana Generation Additions); (5) Continued the installation of the 500/230 KV transformer bank addition at Pearl substation (G10) (Portland Area Additions); (6) Began design for the Ostrander 500kV shunt capacitor group addition; (7) Continued planning studies and design to comply with the N-2 outage criteria; (8) Continued planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (9) Continued planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (10) Continued planning studies to identify and clarify needed infrastructure additions.
- FY 2004: (1) Complete construction of the Kangley-Echo Lake 500kV line and substation addition at Echo Lake, and the 500/230kV transformer bank addition at SnoKing Substation (G1) (Puget Sound Area Additions); (2) Begin construction of Schultz-Wautoma 500kV line and continue Wautoma Substation construction (G2) (North of Hanford/North of John Day); (3) Complete installation of the 500 KV series capacitor addition at Schultz substation (G6) (Cross Cascades North); (4) Complete Grand Coulee-Bell 500kV line and substation additions including 500 KV series capacitor additions at Bell and Dworshak

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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substation, 500 KV series capacitor and controls replacement at Garrison Substation, and the 500 KV shunt reactor addition at Grand Coulee (G9) (Spokane Area and Western Montana Generation Additions) ; (5) Complete the installation of the 500/230 KV transformer bank addition at Pearl Substation (G10) (Portland Area Additions); (6) Complete the Ostrander 500kV shunt capacitor group addition; (7) Begin environmental analysis, demand side management study, design and material acquisition for Olympic Peninsula Addition II (G12); (8) Begin preliminary design for the loop in of the Wautoma-Ostrander 500kV line to Big Eddy Substation (G14); (9) Continue studies for the Libby-Sand Spring-Bell 230kV project (G15 & G20); (10) Resume planning studies for the Monroe-Echo Lake 500kV line #2 (G8) (I-5 Corridor Additions); (11) Continue planning studies and design to comply with the N-2 outage reliability criteria; (12) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (13) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (14) Continue planning studies to identify and clarify needed infrastructure additions.

- FY 2005: (1) Complete construction of the Schultz-Wautoma 500kV line and Wautoma Substation (G2) (North of Hanford/North of John Day); (2) Continue planning studies for the Olympic Peninsula Addition II project (G12); (3) Continue studies for the Southwest Washington-Northwest Oregon generation integration project (G13); (4) Continue studies for the loop in of the Wautoma-Ostrander 500kV line to Big Eddy Substation (G14); (5) Continue planning studies for the Monroe-Echo Lake 500kV line #2 (G8) (I-5 Corridor Generation Additions); (6) Review and keep current studies for the integration of McNary area generation projects that would require (G3) West of McNary (on hold), (G4) Starbuck Generation (on hold), (G5) Lower Monumental and McNary Area Generation (Phase II) projects; (6) Continue planning studies and design to comply with the N-2 outage criteria; (7) Continue planning studies to identify other system reactive needs to mitigate unacceptable low or high voltage problems and other system additions; (8) Continue planning studies to solve the transmission system capacity congestion and for the integration of new generation facilities; (9) Continue planning studies to identify and clarify needed infrastructure additions.

Area & Customer Service 7,840 18,600 12,300

Bonneville's strategic objective for Area and Customer Service projects is to assure that Bonneville meets the reliability standards and the contractual obligations we have to our customers for serving load.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- FY 2003: (1) Completed construction on the Shelton-Kitsap line rebuild to double circuit to provide voltage stability and prevent transformer and line overloads in the Kitsap area; (2) Began the design, material acquisition, and construction to rebuild the Albany-Eugene 115kV line to double circuit from Eugene to the Alderwood Tap; (3) Began rebuild of Minidoka Substation; (4) Continued preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.
- FY 2004: (1) Complete construction to rebuild the Albany-Eugene 115kV line to double circuit from Eugene to the Alderwood Tap; (2) Complete the rebuild of Minidoka Substation; (3) Add 115kV line sectionalizing switches at Victor Tap; (4) Retire low voltage facilities at Addy Substation; (5) Replace the 115-12.5kV transformer at Duckabush Substation; (6) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.
- FY 2005: (1) Add 230kV and 115kV terminal facilities at Vintage Valley Substation; (2) Add 115kV switches at Olympia Substation; (3) Add a 115kV terminal at McNary Substation; (4) Continue preliminary engineering and design for miscellaneous facilities required to meet contractual obligations and maintain reliable service for BPA's service area.

Upgrades & Additions 79,051 53,400 64,100

Bonneville's strategic objectives for Upgrades and Additions are to replace older communications and controls with newer technology including fiber optics in order to maintain or enhance the capabilities of the transmission system; to implement special remedial action control schemes to accommodate new generation and mitigate immediate operational and market constrained paths; and, to support communications and remedial action schemes, among other proposals. During this budget period, BPA will complete design, material acquisition, construction and activation of several fiber optics facilities to provide bandwidth capacity and high-speed data transfers to eventually replace microwave analog radios, which are becoming technologically obsolete and nearing the end of their useful life. Temporarily, in some areas, excess fiber capacity is being offered for a term to telecommunications providers or to public entities such as public utilities, schools, libraries, and hospitals, providing them access to high-speed telecommunication services as a public benefit.

- FY 2003: (1) Completed construction of 37 miles of fiber optic cable and terminations between Custer and Intalco; (2) Completed installation of 10 miles of fiber optic cable and terminations between Longview and Allston; (3) Continued material acquisition and began construction of the 12 mile fiber optic cable on the Raver-Echo Lake 500 kV line;

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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(4) Continued material acquisition and construction of the Kalispell-Hot Springs digital radio section of the Noxon-Hot Springs 200 mile fiber optic project; (5) Delayed design functions for the Thompson Falls to Taft section of the 175 mile Noxon-Hatwai fiber optic project; (6) Delayed design and material acquisition for 41 miles of fiber optic cable and terminations from Echo lake to Monroe to Snohomish; (7) Continued design, material acquisition and start construction of the Custer to Sumas digital radio project that replaces the 8 mile Bellingham-BC Hydro fiber optic project; (8) Continued design and construction of fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (9) Continued replacement and upgrade of key operational and marketing business tools at the Dittmer and Munro control centers; (10) Continued planning, design, material acquisition, construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (11) Continued planning, design, material acquisition, construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

- FY 2004: (1) Complete construction of the 12 mile fiber optic cable on the Raver-Echo Lake 500 kV line; (2) Complete construction of the Kalispell-Hot Springs digital radio section of the Noxon-Hot Springs 200 mile fiber optic project; (3) Continue design functions for the Thompson Falls to Taft to Dworshak to Hatwai sections of the 175 mile Noxon-Hatwai fiber optic project; (4) Begin design, material acquisition construction of 41 miles of fiber optic cable and terminations from Echo lake to Monroe to Snohomish; (5) Begin design, material acquisition construction of 32 miles of fiber optic cable and terminations from Covington to Maple Valley to Echo Lake; (6) Continue construction of fiber projects and digital radio system upgrades to improve the operational telecommunication system and to meet rural needs; (7) Continue replacement and upgrade of operational and business tools at the Dittmer and Munro control centers; (8) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (9) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.
- FY 2005: (1) Complete the Thompson Falls to Taft to Dworshak to Hatwai sections of the 175 mile Noxon-Hatwai fiber optic project; (2) Complete construction of the 41 mile fiber optic Echo Lake-Monroe-Snohomish project; (3) Complete the design, material acquisition and start construction of the 32 mile Covington-Maple Valley-Echo Lake fiber optic project; (4) Design, material acquisition and start construction of the 45 mile Pearl-Troutdale fiber optic project; (5) Continue construction of fiber related projects and digital radio system upgrades to improve the operational telecommunication system; (6) Continue replacement

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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and upgrade of operational and marketing business tools at the Dittmer and Munro control centers; (7) Continue planning, design, material acquisition and construction of special remedial action control schemes required for interconnecting new generation projects and mitigating immediate constrained paths; (8) Continue planning, design, material acquisition and construction of various system additions and upgrades necessary to maintain a reliable system for BPA's service area.

System Replacements 69,266 79,900 74,200

Bonneville's strategic objectives for System Replacement are to replace high-risk, obsolete, and maintenance-intensive facilities and equipment and to reduce the chance of equipment failure by: 1) replacing high voltage transformers and power circuit breakers which are at or near the end of their useful life; 2) replacing risky, outdated and obsolete control and communications equipment; and 3) replacing all other existing high-risk equipment and facilities affecting the safety and reliability of the transmission system.

Non-Electric Replacements:

- FY 2003: (1) Completed various maintenance building and control house roof replacements; (2) Completed seismic upgrades to buildings; (3) Completed various Heating, Ventilation and Air Conditioning (HVAC) replacements; (4) Completed other non-electric replacements as necessary; (5) Completed the acquisition and construction of various new transmission system access roads as part of the new Access Road Program.
- FY 2004: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Continue the design, material acquisition, and construction for the Access Road Program; (6) Design activities for the Dittmer Control Center expansion at the Ross Complex has been postponed due to funding limitations.
- FY 2005: (1) Complete various maintenance building and control house roof replacements; (2) Complete seismic upgrades to buildings; (3) Complete various HVAC replacements; (4) Complete other non-electric replacements as necessary; (5) Continue the design, material acquisition, and construction for the Access Road Program.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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Electric Replacements:

- FY 2003: (1) Continued replacing aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); (2) Began design and material acquisition for reconductoring approximately 22 miles of the John Day-Big Eddy 500kV Line; (3) Continued replacement of PCB-contaminated capacitors at various locations; (4) Continued replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (5) Continued replacement of under-rated and high maintenance substation equipment; (6) Completed replacement of critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (7) Continued the replacement of deteriorating wood pole transmission line structures.
- FY 2004: (1) Complete replacement of aged AC-DC converter valves and control systems at the Celilo Converter Station necessary to continue operation of 3100 MW of DC transmission capability (G7); (2) Complete the reconductor of approximately 22 miles of the John Day-Big Eddy 500kV Line; (3) Continue replacement of PCB-contaminated capacitors at various locations; (4) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (5) Continue replacement of under-rated and high maintenance substation equipment; (6) Replace spacer dampers on various 500kV lines; (7) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (8) Continue replacing deteriorating wood pole transmission line structures.
- FY 2005: (1) Continue replacement of system protection and control equipment and other substation and line facilities as needed to maintain reliability using RCR criteria. Such replacements include relays, annunciators, oscillographs, various types of communication related equipment and SCADA equipment; (2) Continue replacement of under-rated and high maintenance substation equipment; (3) Replace spacer dampers on various 500kV lines; (4) Continue replacing critical, operational tools and marketing business systems at the Dittmer and Munro Control Centers; (5) Continue replacing deteriorating wood pole transmission line structures.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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Projects Funded in Advance **11,212 27,600 89,800**

This category includes those facilities and/or equipment where BPA retains ownership but which are funded by a third party, either in total or in part.

- FY 2003: (1) Completed the construction of transmission facilities needed to integrate 248 MW generation capacity near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (the generator construction is currently on-hold waiting for market conditions to improve); (2) Continued work to integrate 225 MW generation capacity near Goldendale into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (BPA work on this project is now on-hold while the generator waits for market conditions to improve); (3) Completed the integration of new 600 MW generation capacity near Chehalis into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Completed engineering and environmental analysis to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (the generator construction is currently on hold waiting for market conditions to improve) (G5) (on hold); (5) Completed construction of the transmission facilities needed to integrate 600 MW generation capacity near Satsop into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (the generator construction is currently on-hold waiting for market conditions to improve); (6) Continued the integration of new 290 MW generation capacity near Longview into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (7) Continued to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (8) Performed studies to identify system impacts and needs regarding proposed new generation projects; (9) Performed environmental cleanup and other work necessary for the sale of BPA facilities; (10) Completed other projects as requested by customers.
- FY 2004: (1) Continue work to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (G5) (on hold); (2) Design, material acquisition and construction of the Southwest Washington-Northwest Oregon 500 KV line addition (G13) (on hold); (3) Complete the integration of new 290 MW generation capacity near Longview into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (4) Start planning to integrate new 1300 MW generation capacity near Wanapa into the BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (6) Perform studies to identify system impacts and needs regarding proposed new generation projects; (7) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (8) Complete other projects as requested by customers.

- FY 2005: (1) Complete work to integrate new 1300 MW generation capacity near Wallula into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (G5) (on hold); (2) Continue design, material acquisition and construction of the Southwest Washington-Northwest Oregon 500 KV line addition (G13) (on hold); (3) Complete design, acquire materials, and begin construction to integrate new 1300 MW generation capacity near Wanapa into the BPA transmission grid per Transmission Service Request via the Open Access Tariff (pending generator funding); (4) Continue to integrate various new wind generation projects into BPA transmission grid per Transmission Service Request via the Open Access Tariff; (5) Perform studies to identify system impacts and needs regarding proposed new generation projects; (6) Perform environmental cleanup and other work necessary for the sale of BPA facilities; (7) Complete other projects as requested by customers

Total Transmission Business Line – Capital	329,831	413,600	358,400
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Explanation of Funding Changes

	FY 2005 vs. FY 2004 (\$000)
Main Grid	
<ul style="list-style-type: none"> ▪ Reflects fiscal year shifts in materials and construction costs to accommodate updated power flow study results 	-116,100
Area & Customer Services	
<ul style="list-style-type: none"> ▪ Reflects less emphasis on customer service projects. 	-6,300
Upgrades & Additions	
<ul style="list-style-type: none"> ▪ Reflects increased emphasis on both system wide communications upgrades and improvements and additions to other transmission facilities 	+10,700
System Replacements	
<ul style="list-style-type: none"> ▪ Reflects less emphasis on system replacements, except for the Celilo project . . . 	-5,700
Projects Funded in Advance	
<ul style="list-style-type: none"> ▪ Reflects emphasis on completion of large customer funded or third party funded projects related to generation integration 	+62,200
Total Funding Change, Transmission Business Line - Capital	-55,200

Capital Equipment/Capitalized Bond Premium

Funding Schedule by Activity (Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Capital Equipment	19,156	31,200	27,300	-3,900	-12.5%
Capitalized Bond Premium	0	3,000	3,000	0	0.0%
Total, Capital Equipment/Capitalized Bond Premium	19,156	34,200	30,300	-3,900	-11.4%

Description

This activity provides for the acquisition of general and some dedicated business line special purpose capital automatic data processing (ADP) equipment, development of capitalized ADP software, and acquisition of special-use capital furniture and equipment in support of Bonneville's strategic objectives. This budget category provides Bonneville with the ability to acquire general and some dedicated business line special purpose capital ADP equipment. See the Capital Program – Transmission Services Business Line section of this budget for additional discussion of transmission related ADP requirements acquisitions.

Bonneville incurs a bond premium whenever it repays a bond before the due date. When bonds are refinanced, the bond premiums incurred are capitalized. Historically, Bonneville generally has chosen to finance capitalized bond premiums with bonds issued to the U.S. Treasury, as was envisioned in the Federal Columbia River Transmission System Act of 1974.

Detailed Justification

	(dollars in thousands)		
	FY 2003	FY 2004	FY 2005
Capital Equipment	19,156	31,200	27,300

- Acquire capital office furniture and equipment, capital ADP-based administrative telecommunications equipment, ADP equipment (hardware), and support capital software development for certain Bonneville programs. Includes enhancements to Bonneville's information technology processes to provide efficiencies for secure, timely and accurate information. Continue enhancements to Bonneville's Business Enterprise systems that are designed to link key information systems throughout Bonneville and improve business processes. Current efforts include functional expansion into areas not implemented during the initial development phase.

	(dollars in thousands)		
	FY 2003	FY 2004	FY 2005
Capitalized Bond Premium.	0	3,000	3,000

- Continue to assess financial market and when cost-effective, refinance available bonds as prudent.

Total, Capital Equipment/Capitalized Bond Premium .	19,156	34,200	30,300
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Explanation of Funding Changes

	FY 2005 vs. FY 2004 (\$000)	
Capital Equipment		
■ Decrease due to implementation of Business Enterprise Solutions		-3,900
..		
Capitalized Bond Premium		
■ No change		0
Total, Funding Change Capital Equipment/Capital Bond Premium		-3,900

Power Business Line - Operating Expense

Funding Schedule by Activity (Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Production	1,578,930	1,733,078	1,771,108	+38,030	+2.2%
Associated Projects Costs.	215,248	235,739	241,900	+6,161	+2.6%
Fish & Wildlife	146,798	138,834	138,834	0	0.0%
Residential Exchange . . .	143,967	143,802	143,802	0	0.0%
NW Power & Conservation Council	8,005	8,500	8,700	+200	+2.4%
Conservation and Energy Efficiency	57,679	63,113	63,090	-23	0.0%
Total, Power Services - Operating Expense	2,150,626	2,323,066	2,367,434	+44,368	1.9%

Description

Production includes all Bonneville strategic resource planning and business development, short and long-term power purchases, wheeling, electric utility marketing of resources, hedging-related costs, generation and oversight costs including a large thermal nuclear project. These activities identify the Administrator's load obligations, develop product plans and services to meet the needs of Bonneville customers and stakeholders, and acquire resources as needed. As a means of mitigating power market risk, Bonneville's Hedging Policy allows the use of financial instruments in the power, natural gas, and aluminum markets to hedge the price of electricity and reduce Bonneville's exposure to market fluctuations and certain index sales contract provisions.

Associated Projects provide funding for operation and maintenance costs for the FCRPS; minor additions, improvements, and replacements, and liabilities of the Corps and Bureau hydroelectric projects in the Pacific Northwest, which serve many purposes. All agencies emphasize efficient power production from existing facilities and improvement of the performance and availability of power generating units. Bonneville pays additional financing costs of the FCRPS facilities through its Interest Expense and Capital Transfer budget programs. Bonneville provides funding for the operations and maintenance costs that are part of the Lower Snake River Compensation Plan (LSRCP) hatcheries. Bonneville is responsible for annual payments to the Confederated Tribes of the Colville Reservation for their claims concerning their contribution to the production of hydropower by the Grand Coulee Dam in accordance with the Settlement Agreement between the United States and the Tribes (April 1994).

Bonneville's Fish and Wildlife Program provides for the protection, enhancement and mitigation of Columbia River Basin fish and wildlife due to losses attributed to the development and operation of hydroelectric projects on the Columbia River and its tributaries. Bonneville satisfies a major portion of its fish and wildlife responsibilities pursuant to Section 4(h) of the Northwest Power Act by funding projects and activities designed to be consistent with the Northwest Power and Conservation Council's (formerly the Northwest Power Planning Council) Fish and Wildlife Program. Bonneville is also mandated to implement measures under the Endangered Species Act (ESA). These measures are part of the biological opinions issued in December 2000 by NOAA

Fisheries and the USFWS to address the effects of the operation of the FCRPS on threatened and endangered salmon and ESA listed sturgeon and bull trout. The biological opinions require the Action Agencies (Corps, Bureau and Bonneville) to implement actions throughout the Columbia River Basin that comprehensively address all the life stages of ESA-listed fish. The Action Agencies released a Final FY 2003-2007 Implementation Plan for the FCRPS on November 6, 2002, that identifies and describes the specific measures that the three agencies plan to implement in FY 2003-2007 and addresses the actions called for in the NOAA Fisheries and USFWS 2000 Biological Opinions for the FCRPS. The Implementation Plan, together with projects undertaken to address mitigation for non-listed species under the Northwest Power Act, form the basis for BPA's planned expenditures of \$139 million per year. This is within the range of \$109 - \$179 million of accrued expenses assumed in the May 2000 power rate proposal for FYs 2002-2006, prior to the biological opinions and Implementation Plan. Bonneville worked with the Council and regional fisheries managers to develop an agreed-upon set of protocols to be used in managing the costs of the program for the FY 2004-2006 period. The objective is to keep Bonneville's expenditures to an annual average of \$139 million, while allowing contractors both funding stability and the flexibility needed to accomplish the work while being responsive to environmental conditions.

Bonneville's fish and wildlife expenditures funds will focus on activities that benefit Columbia River Basin fish and wildlife resources including projects designed to:

- increase survival of ESA-listed and non-listed fish at FCRPS dams and reservoirs;
- increase survival of ESA-listed and non-listed fish throughout their life cycle by protecting and enhancing important habitat areas;
- reform hatchery practices and use hatcheries to contribute to conservation and recovery of ESA-listed and non-listed fish;
- reduce harvest-related mortality on ESA-listed and non-listed fish and support sustainable fisheries; and,
- support a disciplined and well-coordinated research, monitoring, and evaluation program.

To the extent possible, Bonneville is integrating the actions implemented in response to the 2000 FCRPS Biological Opinions with projects implemented under the Council's Fish and Wildlife Program implementing an Integrated Fish and Wildlife Program. The Council's Provincial Review and subbasin planning processes are the primary vehicle for soliciting project proposals to address biological opinion actions. Provincial Review project solicitations identify specific biological opinion implementation needs in conjunction with the broader non-ESA Northwest Power Act priorities. Bonneville also may use targeted solicitations if biological opinion requirements are not fully satisfied through the Provincial Review's solicitations.

The FY 1997 Energy and Water Development Appropriations Act added section 4(h)(10)(D) to the Northwest Power Act, directing the Council to appoint an Independent Scientific Review Panel (ISRP) "to review projects proposed to be funded through that portion of Bonneville Power Administration's fish and wildlife budget that implements the Council's fish and wildlife program." And, "... in making its recommendations to Bonneville, the Council shall consider the impact of ocean conditions on fish and wildlife populations; and shall determine whether the projects employ cost effective measures to achieve program objectives." The Conference Report on the FY 1999 Energy and Water Development Appropriations Act included a new assignment for the ISRP and the Council. The ISRP was to review the fish and wildlife projects, programs, or measures included in Federal agency budgets that are reimbursed, and/or directly funded, by Bonneville and to make funding recommendations to Congress. The ISRP was directed to

determine whether the proposals are consistent with the scientific criteria in the Northwest Power Act as amended in 1996, and provide a report to the Council by April 1 of each year. The Council, in turn, must report to the Congress annually by May 15. Consequently, projects funded under Bonneville's Integrated Fish and Wildlife Program will be reviewed and prioritized as part of the Council initiative process.

Consistent with the principles of the Federal Caucus' *Final Basinwide Salmon Recovery Strategy* (All-H Strategy), Bonneville is implementing much of the off-site mitigation actions required by the year 2000 Biological Opinions through the Council's Fish and Wildlife Program. Under the Northwest Power Act, the Fish and Wildlife Program is tasked with protecting and rebuilding the Columbia River Basin fish and wildlife affected by the development and operation of the FCRPS. The Provincial Review process, sponsored by the Council, provides the mechanism for integrating activities under the existing Fish and Wildlife Program with the measures focused on ESA-listed fish stocks in the NMFS and USFWS Biological Opinions.

The Northwest Power Act created the Residential Exchange Program (REP) to extend the benefits of low-cost Federal power to the residential and small farm customers of Pacific Northwest electric utilities that meet certain conditions. The 1996 Comprehensive Regional Review recommended that Bonneville engage in settlement discussions regarding the Residential Exchange. Bonneville then developed a Subscription Strategy based on the recommendations of the Comprehensive Review. That strategy proposed a comprehensive settlement of the REP for Investor-Owned Utilities (IOUs) in the Pacific Northwest, which has resulted in new contracts with regional IOUs that provide power and monetary benefits to their residential and small farm customers.

To settle the REP with the IOUs, IOU customers were offered 1900 aMW in power and monetary benefits for the FY 2002-2006 rate period. The power is sold at a price equivalent to the priority firm power rate. The monetary benefits are calculated based on the forecast of the cost of purchasing the power in the market that was used in the June 2001 Supplemental Rate Proposal, less the rate used for sale of power to the IOU customers adjusting for the cost recovery adjustment clauses. All 6 regional IOUs signed contracts in the fall of 2000 implementing this settlement of the Residential Exchange. They originally were to receive 1000 aMW of power and 900 aMW in monetary benefits for FY 2002-2006, but two IOUs subsequently sold 619 aMW of power back to Bonneville as part of Bonneville's rate mitigation efforts for FY 2002. In addition, 3 other IOUs triggered the clause in their contracts to convert their power purchases to financial payments. In FY 2007 the total amount of settlement benefits changes to 2200 aMW. Under the Subscription Strategy, Bonneville stated its intent for all of these benefits to be provided as power; however, Bonneville may provide either power or monetary benefits under the terms of the settlement agreements.

Bonneville's preference utilities, or public agency utilities, have been eligible to execute new Residential Exchange Program contracts since October 2001, except for the nine utilities that previously executed settlement agreements for terms ending July 1, 2011. These customers have been forecasted to have average system costs that are lower than the Exchange Program rate and thus would not qualify for these benefits.

The Northwest Power Act directs that expenses of the Northwest Power and Conservation Council (Council), subject to certain limits based on forecasted Bonneville power sales, shall be included in Bonneville's annual budget to Congress. Funding for the Council is provided by Bonneville and is recovered through Bonneville power rates. Its major activities include the periodic preparation of a Northwest Conservation and Electric Power Plan (a 20-year electric energy

BPA/Power Business Line - Operating Expense **FY 2005 Congressional Budget**

demand and resources forecast and energy conservation program) and a Columbia River Basin Fish and Wildlife Program of loss mitigation and resource enhancement actions.

The competitive market situation is driving the need for alternatives to the traditional approaches to developing conservation resources. The PBL will acquire conservation in accordance with the Council's guidance and act as a catalyst for energy efficiency and direct application renewables. These resources will provide a vital component of PBL's diversified resource portfolio that will: (1) meet conservation targets; (2) achieve a least cost resource mix; (3) dampen the cost impacts of power purchases; (4) avoid the costs of ramping programs and infrastructure up and down; (5) extend the value of the FCRPS to customers; (6) build the region's resource portfolio with conservation and direct application renewables. Bonneville also is exploring how best to integrate demand-side management, distributed generation, and other leading edge technologies (i.e. Energy Web program and non wires solutions) into its transmission planning process.

Detailed Justification

	(dollars in thousands)		
	FY 2003	FY 2004	FY 2005
Production	1,578,930	1,733,078	1,771,108

- **Power Purchases/Pacific Northwest Coordination Agreement (PNCA) Interchange:**
Includes purchase power for efficient operation of the power system, fish mitigation and resale. Due to higher and more volatile market prices in 2001, Bonneville was subject to much greater demand for service from its customers for FY 2002-2006. This increase in load required that Bonneville make substantially greater power purchases in the market. In order to mitigate a larger rate increase, FY 2004 and FY 2005 expenses include \$274 million, and \$311 million, respectively; in IOU and DSI load buy downs. See additional discussion of the evolving power market included in "Significant Program Shifts" included in the Overview section of this budget.
- **Under terms of the PNCA, Bonneville makes interim cash payments to other generating utilities for power received as interchange energy.** Likewise, Bonneville receives interim cash payments from other generating utilities for power that Bonneville delivers as interchange energy. Interchange energy is an energy exchange between utilities to supply all or a part of any deficiency between a utility's actual energy capability and its firm energy load carrying capability. The energy is then returned to the supplying utility at a time that it has a deficiency, and any interim cash payments made on such energy is refunded.
- **Power Scheduling/Marketing:** Schedule and market (buy/sell) electric energy with Bonneville customers and the Pacific Northwest's interconnected utilities. Scheduling includes PBL's implementation of physical and memo power schedules and associated transmission schedules, implementation of Electronic Tagging (ETag) in accordance with NERC, and in accordance with FERC, implementation of electronic scheduling and the RTO as it evolves. PBL's development of a new Transaction Scheduling System will facilitate the above needs.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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Trojan: Continue termination and decommissioning of Bonneville's 30 percent share of the Trojan Nuclear Plant. Decommissioning continues at a consistent level through FY 2005.

- Columbia Generating Station (WNP-2): Continue to acquire full capability of Columbia Generating Station (Columbia). Columbia has now completed the transition to a 24-month fuel cycle from a 12-month cycle. A maintenance and refueling outage occurred in FY 2003 and is planned again in FY 2005.
- WNP-1/WNP-3: Continue to fulfill contractual obligations for WNP-1 and WNP-3.
- Long Term Power Purchases and Wheeling:

FY 2004: Continue to acquire 100 percent of the Idaho Falls, Cowlitz Falls, Wauna and Bonneville's share of Foote Creek 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the output of the Foote Creek 2 and 4 wind projects and a 15-kW share of the output from the Solar Ashland Project. Continue to acquire 90MWs of Stateline wind project. Continue to acquire 100 percent of the output of the Condon and Klondike wind projects. Continue to fund the White Bluffs solar project. Continue to make decisions whether to acquire a share of the output from, and/or provide resource integration services for, additional renewable generation.

FY 2005: Continue to acquire 100 percent of the Idaho Falls, Cowlitz Falls, Wauna and Bonneville's share of Foote Creeke 1 project output. Continue contract payments on four billing credit projects. Continue to acquire 100 percent of the output of the Foote Creek 2 and 4 wind projects and a 15-kW share of the output from the Solar Ashland Project. Continue to acquire 90MWs of Stateline wind project. Continue to acquire 100 percent of the output of the Condon and Klondike wind projects. Continue to fund the White Bluffs solar project. Make decisions whether to acquire output from additional renewable generation projects and /or provide resource integration services for additional renewable generation.

- Generation & Oversight:

FY 2003: Continued to provide oversight of all contracts signed to date.

FY 2004: Continue to provide oversight of all contracts signed to date. Complete the NEPA process for the Maiden Wind project. Provide oversight of large thermal generating plants from which Bonneville purchases capability to insure that all Bonneville approval rights are protected; coordinate, communicate and administer agreements, issues and programs between Bonneville and the project owners. Continue to make decisions whether to acquire a share of the output from additional renewable generation projects and or provide resource integration services for additional renewable generation.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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FY 2005: Continue to provide oversight of all contracts signed to date. Provide oversight of large thermal generating plants from which Bonneville purchases capability to insure that all Bonneville approval rights are protected; coordinate, communicate and administer agreements, issues and programs between Bonneville and the project owners. Complete NEPA process and make decisions whether to acquire renewable generation projects initiated in FY 2003.

Associated Project Costs **215,248** **235,739** **241,900**

- Support FCRPS project costs and work to strengthen relationships to improve project support and better understand project costs. This helps to maintain FCRPS system integrity and to attain BPA's strategic business objectives.

- Bureau of Reclamation:
FY 2003: Continued direct funding Bureau O&M power activities.
FY 2004: Continue direct funding Bureau O&M power activities.
FY 2005: Continue direct funding Bureau O&M power activities.

- Corps of Engineers:
FY 2003: Continued direct funding Corps O&M power activities.
FY 2004: Continue direct funding Corps O&M power activities.
FY 2005: Continue direct funding Corps O&M power activities.

Fish and Wildlife **146,798** **138,834** **138,834**

In a manner consistent with the assumptions used for the FY 2002-2006 power rate case:

Anadromous Fish: Continue implementing projects which support ESA listed species and other measures called for under the 2000 FCRPS NMFS Biological Opinion. Use the Council's Provincial Review and Sub-basin Planning processes to identify activities for implementation. Implement and develop activities that protect and enhance tributary and estuary habitat, improve mainstem habitat on an experimental basis, reduce potentially harmful hatchery practices, and contribute to sustainable fisheries. These activities have been selected in response to the Northwest Power Act section 2(6) to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

Resident Fish: Implement activities to determine the impacts of the FCRPS on Bull trout and mitigate for those impacts, and promote the reproduction and recruitment of Kootenai River white sturgeon. These activities have been selected in response to the 2000 USFWS FCRPS Biological Opinion and the Northwest Power Act to "protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries."

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Continue mitigation in resident fish for anadromous losses (substitution), mitigation for reservoir operation impacts to resident fish, and continue to refine, quantify, and delineate the difference between the two.
- Wildlife: Continue the current program including funding for wildlife actions resulting from Council Fish and Wildlife Program amendments for wildlife mitigation. These activities have been selected in response to the Northwest Power Act to “protect, mitigate and enhance fish and wildlife including related spawning grounds and habitat on the Columbia River and its tributaries.”

Residential Exchange 143,967 143,802 143,802

- Includes negotiated contract settlement agreement costs related to monetary benefits consistent with assumptions in the power rate case and subscription strategy.

Northwest Power and Conservation Council 8,005 8,500 8,700

- Continue support of the Northwest Power and Conservation Council activities, as directed under the Northwest Power Act, including regional power plan development and maintenance, and fish and wildlife program activities.

Conservation and Energy Efficiency 57,679 63,113 63,090

- Continue close out of the Legacy conservation resource acquisition contracts, which support Bonneville’s contractual obligation to serve customer load growth. As part of the power subscription strategy and the 2002 Power Rate Case, Bonneville implemented a conservation and renewables rate credit system for utility customers.
- Provide credible, unbiased information or technical or financial support to conservation purposes. As an agency of the DOE, and with independent responsibilities based on its authorizing legislation, Bonneville has a statutory responsibility to provide support to certain conservation objectives that are governmental in nature, such as assisting in the development of emerging technologies and providing unbiased information to consumers. Bonneville is participating with other regional entities to support market transformation and development activities that meet the needs of Bonneville customers and create business opportunities for the private sector in the Pacific Northwest.
- Seek to make the existing energy efficiency marketplace larger by helping to remove barriers which customers face in the development of conservation projects. This opens up possibilities that have previously been foreclosed, thus serving to “grow the pie” or expand business opportunities for our private and public sector partners. This activity must be self-financing; that is, payments from customers must cover all of the costs of performing the service.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Create and enhance markets for energy efficiency and end-use renewables through delivery of public benefits. Promote the development and implementation of new energy efficiency technologies. Provide leadership and collaborative funding for market transformation initiatives. Continue activities being performed through the regionally funded Northwest Energy Efficiency Alliance through a multi-party agreement signed in 2000. Support the Energy Web, a program advancing innovation and deployment of new energy technologies. This program will: (1) provide benefit to the Pacific Northwest; (2) promote standards and technology development deployment to achieve business benefits for Bonneville and its customers; and (3) promote the “Green” aspects of the Energy Web. Implications of participation in Energy Web development include:
 - Improve integration and consideration of non-construction alternatives in the transmission planning process.
 - Diversify Bonneville risk hedges to include physical alternatives such as demand reductions and peak generation.
 - Demonstrate potential to reduce peak loads and transmission needs.
 - Clarify location benefits associated with peak load reduction, power and system reliability, power quality, and avoiding greenhouse gas production.

Total, Power Business Line – Operating Expense. . .	2,150,626	2,323,066	2,367,434
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Explanation of Funding Changes

FY 2005 vs. FY 2004 (\$000)

Production

- Reflects primarily an increase in power purchase activities offset by a shift in Energy Northwest Project debt service +38,030

Associated Project Costs

- Increase due to security, biological opinion requirements, and improvements, replacements, and minor additions at the projects +6,161

Fish and Wildlife

- No change. 0

Residential Exchange

- No change 0

Northwest Power and Conservation Council

- Slight increase in Council funding +200

Conservation and Energy Efficiency

- Minor change -23

Total Funding Change, Power Business Line - Operating Expense	+44,368
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Transmission Business Line - Operating Expense

Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Engineering	18,034	30,377	30,869	+492	+1.6%
Operations	98,577	98,597	100,196	+1,599	+1.6%
Maintenance	124,241	136,127	138,336	+2,209	+1.6%
Total, Transmission Business Line - Operating Expense	240,852	265,101	269,401	+4,300	+1.6%

Description

This activity provides for the transmission system services of engineering, operations and maintenance for Bonneville's electric transmission system of over 15,000 circuit miles (24,135 circuit kilometers) of lines, 284 substations, and associated power system control and communication facilities with an invested cost of more than \$4.8 billion. Primary strategies of this program are: 1) maintain the safety and reliability of the transmission system, consistent with the General Goal 4; 2) increase the focus on customers; 3) optimize the transmission system; and 4) improve Bonneville's competitive position.

Detailed Justification

	(dollars in thousands)		
	FY 2003	FY 2004	FY 2005
Engineering	18,034	30,377	30,869

Continue efforts to identify best methods for improving system reliability and maintenance practices, and continue cost reduction efforts by identifying opportunities for low cost reinforcement and voltage support of the existing transmission system.

- R&D: Conduct in-house transmission system research and development, including (1) studies on reliability, HVDC (high voltage direct current) and HVAC (high voltage alternating current) outage reduction, (2) methods to update existing facilities and reduce maintenance costs including reliability-centered monitoring and recording methods for analysis.
- Technical Support: Provide technical support activities, such as transmission system planning and studies to optimize portions of the system. Provide support for non-wires solutions studies and pilot projects.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Capital-to-Expense Adjustments: Conduct annual analysis of Bonneville's outstanding capital work orders to assess whether they should be expensed.
- Reimbursable Transactions: Enter into written agreements with Federal and non-Federal entities that have work or services to be performed by Bonneville staff at the expense of the benefiting utilities. The projects must be beneficial, under agreed upon criteria, to Bonneville operations and to the Federal or non-Federal entity involved. Additionally, these activities contribute to more efficient or reliable construction of the Federal transmission system or otherwise enhance electric service to the region.
- Leased Facilities: Lease delivery facilities and voltage support facilities, when operationally feasible, to support the transmission system instead of building or purchasing new assets.

Operations 98,577 98,597 100,196

- FY 2003: Continued to operate within parameters of regional transmission authorities. Prepared for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continued development and implementation of business systems and tools. Participated in planning and preparation for potential establishment of an RTO.
- FY 2004: Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training apprentices and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.
- FY 2005: Continue to operate within parameters of regional transmission authorities. Continue preparation for increased complexity of outage scheduling, transmission scheduling, and dispatching as well as impact of an expected high attrition rate of skilled operation dispatching workforce by recruiting and training students, apprentices, and skilled replacements. Continue development and implementation of business systems and tools. Participate in planning and preparation for potential establishment of an RTO.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Substation Operations: Perform operations functions necessary to provide electric service to customers and to protect the Federal investment in electric equipment. Includes equipment adjustments, switching lines and equipment during emergencies or maintenance, isolating damaged equipment, restoring service to customers, and inspecting equipment, reading meters, et cetera.
- Power System Control & Dispatching: Perform central dispatching, control, and monitoring of the electric operation of the Federal transmission system. Also includes load, frequency, and voltage control of Federal generating plants, and operation of the system control and data computers at Dittmer and Munro Control Centers.
- Operations Standards & Engineering: Analyze system loads, voltage levels, outage information, stability levels and other data, and make policy recommendations for system operations and related affairs. Develop of control center requirements for centralized automation of substations and generation, and participate with other utilities in developing utility operating standards and guides.
- Marketing, Sales, & Services: Provide management and direction of transmission rates, and provide business strategy in marketing of transmission and ancillary products and services of the Transmission Business Line.
- Transmission Scheduling: Provide open access to the Federal transmission system consistent with the Open Access Transmission Tariff approved by FERC. Schedule and market transmission capacity to Bonneville customers, California ISO and Pacific Northwest's interconnected utilities. Manage the reservations and scheduling of all transmission services associated with the Open Access Transmission Tariff.

Maintenance 124,241 136,127 138,336

In all aspects of maintenance, Bonneville is shifting to the implementation of Reliability-Centered Maintenance (RCM) practices. This change is focused on improving system reliability and increasing availability in a deregulated market.

Access road maintenance costs are expected to increase dramatically as Bonneville addresses the aging roads system and environmental constraints associated with construction, enhancement, and maintenance of access roads. The Bonneville transmission system encompasses approximately 50,000 miles of access roads. Cost for maintenance activities are budgeted at \$1,000,000 annually.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- FY 2003: Continued to refine RCM practices at all of Bonneville's O&M regions. Continued to improve performance to meet System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) targets. Continued efforts to achieve the SAIFI and SAIDI targets of no control chart violations for circuit importance categories 1-2 (highest importance), and not more than one violation for category 4. Control charts are statistically-based graphs which illustrate variability in performance. Continued to improve availability performance in a deregulated market by utilizing energized work practices and outage coordination. Used recruitment incentives to ensure succession of the current work force and remain competitive as an employer in the utility industry. Assured a safe work environment through safety awareness and improved work practices. Increased outage scheduling planning to increased customer satisfaction. Continued high levels of vegetation management and increased access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2004: Continue to refine RCM practices at all of Bonneville's O&M regions. Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling and coordination planning to increase customer satisfaction and system availability. Continue high levels of vegetation management. Continue access road work to provide reliable access to facilities and ensure environmental compliance.
- FY 2005: Continue to improve performance to meet SAIFI and SAIDI targets as explained above. Continue to improve system availability performance through new maintenance procedures and work practices. Continue to prepare for the impact of an expected high attrition rate among Bonneville's aging workforce by recruiting apprentices and replacements for critical minimum crew size workload positions. Increase outage-scheduling planning and coordination to increase customer satisfaction and system availability. Maintain vegetation management levels to insure system reliability. Continue access road work to provide reliable access to facilities and ensure environmental compliance.
- Transmission Line Maintenance: Maintain and repair nearly 24,135 km (15,000 circuit miles) of high voltage transmission lines, of which over 6,436 km (4,000 circuit miles) are 500-kV transmission EHV (extra-high voltage), for which maintenance is two and one-half times more labor-intensive than maintenance of lower transmission voltages, although more efficient in transmission of power. This responsibility includes maintaining transmission rights-of-way to ensure system reliability, safety and environmental compliance.

(dollars in thousands)

FY 2003	FY 2004	FY 2005
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- Substation Maintenance: Maintain and repair the transmission system power equipment located in Bonneville's 285 substations. Work includes inspections, diagnostic testing, predictive and condition based maintenance
- System Protection Maintenance: Maintain relaying metering and remedial action scheme equipment used to control and protect the electrical transmission system and to meter energy transfers for the purpose of revenue billing. Additionally, field-engineering services provide technical advice and assure the correct operation of power system relaying and special control systems used to support interregional energy transmission capabilities.
- Power System Control Maintenance: Test, repair, and provide field engineering support of Bonneville's highly complex equipment, communications and control systems, including seven major microwave systems, fiber optic systems, and other critical communications and control equipment that support the power system.
- Non-Electric Plant Maintenance: Maintain Bonneville's non-electric facilities. Includes site, building, and building utility maintenance; custodial services; station utility; and other maintenance service activities on Bonneville-owned or Bonneville-leased non-electric facilities.
- Maintenance Standards & Engineering: Establish, monitor, and update system maintenance standards, policies, and procedures; and review and update long-range plans for maintenance of the electric power transmission system.

Total, Transmission Business Line - Operating Expense	240,852	265,101	269,401
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Explanation of Funding Changes

	FY 2005 vs. FY 2004 (\$000)
Engineering	
■ Minor increase reflects changes in program activities such as research and development.	+492
Operations	
■ Increase primarily due to deferred program costs offset by near-term cost efficiencies.	+1,599
Maintenance	
■ Increase primarily due to deferred program costs offset by near-term cost efficiencies	+2,209
Total Funding Change, Transmission Business Line – Operating Expense.	+4,300

Interest, Pension and Post-retirement Benefits - Operating Expense and Capital Transfers

Funding Schedule by Activity (Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	%Change
BPA Bond Interest (Net)	155,600	189,576	217,903	+28,327	+14.9%
BPA Appropriation Interest	65,279	42,591	37,861	-4,730	-11.1%
Corps of Engineers Appropriation Interest	152,600	170,332	171,590	+1,258	+0.7%
Lower Snake River Comp Plan Interest	16,450	16,445	16,445	0	0.0%
Bureau of Reclamation Appropriation Interest	43,061	42,428	42,428	0	0.0%
Subtotal, Interest – Operating Expense	432,990	461,372	486,227	+24,855	+5.4%
Pension & Post-retirement Benefits . . .	35,100	30,900	26,500	-4,400	-14.2%
Total, Interest, Pension and Post- retirement Benefits	468,090	492,272	512,727	+20,455	+4.2%

Operating Expense

Description

Interest expense provides for the payment of interest due on FCRPS debt. This consists of capital investment in FCRPS hydroelectric generating and transmission facilities of Bonneville, the Corps and the Bureau. Investments were financed by Congressional appropriations and Bonneville borrowings from the U.S. Treasury. Bonneville repays FCRPS debt through its power sales and transmission services revenues.

Since receiving Treasury borrowing authority in 1974 under the Transmission System Act, all Bonneville borrowing has been at market rates. As of October 1, 1996, all of Bonneville's repayment obligations on FCRPS appropriated investment (Corps and Bureau FCRPS investment and Bonneville investment financed with appropriations prior to the Transmission System Act) which were unpaid as of September 30, 1996, were restructured and assigned new current-market interest rates. The Bonneville Appropriations Refinancing Act of 1996 called for resetting (reducing) the unpaid principal of FCRPS appropriations and reassigning (increasing) interest rates. New principal amounts were established as of the beginning of FY 1997 at the present value of the principal and annual interest payments Bonneville would make to the U.S. Treasury for these obligations in the absence of the legislation, plus \$100 million. The new principal amounts are then assigned new interest rates based on the Treasury yield curve rates prevailing at the end of FY 1996. Bonneville's outstanding repayment obligations on

appropriations at the end of FY 1996 were \$6.7 billion with a weighted average interest rate of 3.4 percent. The refinancing reduced the principal amount to \$4.1 billion with a weighted average interest rate of 7.1 percent. Implementation of the refinancing took place in 1997 after audited actual financial data was available. As called for in the legislation, Bonneville submitted its calculations and interest rate assignments implementing the Bonneville Appropriations Refinancing Act to Treasury for their review and approval. Treasury approved the implementation calculations in July 1997. The Act also calls for all future FCRPS appropriations to be assigned prevailing Treasury yield curve interest rates.

Interest estimates are a direct function of costs of Treasury borrowing to Bonneville, repayment status of outstanding FCRPS investments, and projected additions to FCRPS plant in service. These estimates may change over time depending on forecasted market conditions. The interest cost estimates below include the impact of Bonneville's appropriation refinancing legislation.

Bonneville has been paying its unfunded liability of the CSRS and post-retirement benefits into the General Fund of the U.S. Treasury (receipt account 892889) since FY 1998. These payments are consistent with the FY 2001 Administration's budget which assumed Bonneville would prospectively cover the full unfunded liability that accrues in fiscal years after FY 1997 of the Civil Service Retirement and Disability Fund (Disability Fund), the Employees Health Benefits Fund (Health Fund) and the Employees Life Insurance Fund (Insurance Fund) that it had not covered prior to FY 1998. As part of the FY 2001 Administration's Budget, Bonneville assumed its entire CSRS cost recovery would be phased in over a ten-year period given that wholesale power and transmission rates for Bonneville were contractually frozen until the end of FY 2001 in order to meet competitive market pressures. For the remainder of the ten-year period, Bonneville paid \$35 million in FY 2003, and the following amounts are assumed to be recovered by Bonneville through rates and paid into the General Fund of the U.S. Treasury: \$30.9 million in FY 2004, \$26.5 million in FY 2005, \$23.2 million in FY 2006, and \$21.1 million in FY 2007. Cost estimates include Bonneville and the power-related portion of Corps, Bureau of Reclamation, and the United States Fish & Wildlife Pension and Post-retirement Benefits.

Capital Transfers

Funding Schedule by Activity

(Accrued Expenditures)

	(dollars in thousands)				
	FY 2003	FY 2004	FY 2005	\$ Change	% Change
Bonneville Bond Amortization	482,687	118,800	203,500	+84,700	+71.3%
Bureau Appropriation Amortization . . .	18,000	0	404	+404	+100%
Bonneville Appropriation Amortization .	39,000	66,371	1,501	-64,870	-97.7%
Corps Appropriation Amortization	4,000	61,337	97,693	+36,356	+59.3%
Total, Capital Transfers	543,687	246,508	303,098	+56,590	+23.0%

Description

This activity conveys funds to the U.S. Treasury for repayment of certain FCRPS costs not included in the Associated Project Costs budget. Since capital transfers are cash transactions they are not considered budget obligations.

BONNEVILLE POWER ADMINISTRATION
TOTAL OBLIGATIONS/OUTLAYS

(in millions of dollars)

KFF 23-Jan-04

FISCAL YEAR

BP-1 SUMMARY 1,3/	2003		2004		2005		2006	2007	2008	2009
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	144	144	144	144	144	144	144	165	165	165
2 Power Business Line 2/	1,794	1,794	1,969	1,969	2,013	2,013	1,985	1,714	1,708	1,774
3 Transmission Business Line	559	559	651	651	538	538	501	620	709	695
4 Conservation & Energy Efficiency	83	83	93	93	99	99	95	95	94	94
5 Fish & Wildlife	158	158	175	175	175	175	175	175	175	175
6 Interest/ Pension 4/	468	468	492	492	513	513	527	545	576	597
7 Associated Project Cost - Capital	99	99	111	111	116	116	119	133	145	137
8 Capital Equipment	19	19	31	31	27	27	22	23	23	23
9 Planning Council	8	8	9	9	9	9	9	9	9	9
10 Projects Funded in Advance	11	11	28	28	90	90	142	78	20	20
11 Capitalized Bond Premiums	0	0	3	3	3	3	3	3	3	3
12 TOTAL OBLIGATIONS/OUTLAYS 3/	3,344	3,344	3,706	3,706	3,726	3,726	3,722	3,559	3,627	3,692

REVENUES AND REIMBURSEMENTS

(in millions of dollars)

FISCAL YEAR

BP-1 SUMMARY

	2003		2004		2005		2006	2007	2008	2009
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
13 Revenues 5/	3,795	3,795	3,728	3,728	3,647	3,647	3,590	3,491	3,617	3,682
14 Project Funded in Advance	11	11	28	28	90	90	142	78	20	20
15 TOTAL	3,806	3,806	3,756	3,756	3,737	3,737	3,732	3,569	3,637	3,702
BUDGET AUTHORITY (NET)	283		(30)		(10)		(10)	(9)	(10)	(10)
16 OUTLAYS (NET) 6/		(462)		(30)		(10)	(10)	(9)	(10)	(10)

The accompanying notes are an integral part of this table.

- 1/ This FY 2005 budget includes capital and expense estimates for the Power Business Line based on the SN CRAC rate proposal. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and final 2004 transmission rate proposal. Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget also reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2003 costs are based on BPA's audited actual financial results. Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.
- 2/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.

The FY 2003 total obligation amount included in this FY 2005 Congressional budget is consistent with both the Facts 2 and Max data systems, and BPA audited actuals. The detailed breakout of this data from BPA's classifications for audited actuals has been refined in this budget submission, consistent with the BPA federal budget format.
- 4/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.
- 5/ Revenues are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, however causing the same net outlay result. Adjustments for depreciation and 4(h)(10)(C) are also assumed.
- 6/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that along with actual market conditions will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated net outlay estimates could change due to changing market conditions, hydro conditions and continuing restructuring of the electric industry.

BP-2

EXPENSED OBLIGATIONS/OUTLAYS 1,4/

Current Services

(in millions of dollars)

FISCAL YEAR

	2003		2004		2005		2006	2007	2008	2009
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
1 Residential Exchange	144	144	144	144	144	144	144	165	165	165
2 Power Business Line 2/	1,794	1,794	1,969	1,969	2,013	2,013	1,985	1,714	1,708	1,774
3 Transmission Business Line	241	241	265	265	269	269	279	289	300	309
4 Conservation & Energy Efficiency	58	58	63	63	63	63	63	63	62	62
5 Fish & Wildlife	147	147	139	139	139	139	139	139	139	139
6 Interest/ Pension 3/	468	468	492	492	513	513	527	545	576	597
7 Planning Council	8	8	9	9	9	9	9	9	9	9
8 OBLIGATIONS/ OUTLAYS	2,860	2,860	3,081	3,081	3,149	3,149	3,145	2,923	2,958	3,055
9 Projects Funded in Advance	11	11	28	28	90	90	142	78	20	20

CAPITAL OBLIGATIONS/OUTLAYS

(in millions of dollars)

FISCAL YEAR

BP-2 continued	2003		2004		2005		2006	2007	2008	2009
	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Outlays	Oblig.	Oblig.	Oblig.	Oblig.
10 Conservation & Energy Efficiency	25	25	30	30	36	36	32	32	32	32
11 Transmission Business Line	319	319	386	386	269	269	222	331	409	386
12 Associated Project Cost - Capital	99	99	111	111	116	116	119	133	145	137
13 Fish & Wildlife	12	12	36	36	36	36	36	36	36	36
14 Capital Equipment	19	19	31	31	27	27	22	23	23	23
15 Capitalized Bond Premiums	0	0	3	3	3	3	3	3	3	3
16 TOTAL CAPITAL INVESTMENTS 15	473	473	598	598	487	487	435	558	648	617
17 TREASURY BORROWING AUTHORITY TO FINANCE CAPITAL OBLIGATIONS 4,5/	473		598		487		435	558	648	617
18 TREASURY BORROWING AUTHORITY TO FINANCE OTHER OBLIGATIONS	1		(401)		(192)		(95)	(178)	(184)	(90)
19 TOTAL TREASURY BORROWING AUTHORITY	470		216		295		339	380	464	527

The accompanying notes are an integral part of this table.

- 1/ This FY 2005 budget includes capital and expense estimates for the Power Business Line based on the SN CRAC rate proposal. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and final 2004 transmission rate proposal. Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget also reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2003 costs are based on BPA's audited actual financial results.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

- 2/ The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.
- 4/ This budget has been prepared in accordance with the Budget Enforcement Act (BEA) of 1990. Under this Act all BPA budget estimates are treated as mandatory and are not subject to the discretionary caps included in the BEA. These estimates support activities which are legally separate from discretionary activities and accounts. Thus, any changes to BPA estimates cannot be used to affect any other budget categories which have their own legal dollar caps. Because BPA operates within existing legislative authority, BPA is not subject to a Budget Enforcement "pay-as-you-go" test regarding its revision of funding estimates.
- 5/ Treasury Borrowing Authority to Finance Other Obligations represents the use of (positive), or building up of (negative), deferred borrowing. Deferred borrowing is created when Bonneville uses cash from revenues to liquidate capital obligations in lieu of Treasury borrowing. This creates the ability in future years to borrow money, when fiscally prudent, to liquidate revenue funded activities. The amount on this line, under the title "Treasury Borrowing Authority to Finance Other Obligations" represents the annual use, or creation of deferred borrowing. OMB has requested that Bonneville show this deferred borrowing as a resource carried forward from year-to-year in the manner displayed here.

BP-3

CURRENT SERVICES
(in millions of dollars)

CAPITAL TRANSFERS

Amortization:

20 BPA Bonds	
21 Bureau Bonds	
22 BPA Appropriations	
23 Corps Appropriations	
24 TOTAL CAPITAL TRANSFERS	

2003 Pymts
483
18
39
4
544

FISCAL YEAR

2004 Pymts
119
0
66
61
247

2005 Pymts	2006 Pymts	2007 Pymts	2008 Pymts	2009 Pymts
204	130	111	245	150
0	1	0	1	0
2	110	73	90	130
98	108	205	138	257
303	348	389	473	537

STAFFING

25 FULL-TIME EQUIVALENT (FTE)

3,153

3,205

3,166	3,143	3,204	3,204	3,204
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PROGRAM & FINANCING SUMMARY

Current Services

(in millions of dollars)

Identification Code: 89-4045-0-3-271

Identification Code: 89-4045-0-3-271

		est.						
		2003	2004	2005	2006	2007	2008	2009
Program by activities:								
Operating expenses:								
0.01	Power Business Line	1,594	1,733	1,771	1,736	1,447	1,435	1,493
0.02	Residential Exchange	144	144	144	144	165	165	165
Associated Project Costs:								
0.05	Bureau of Reclamation	54	61	63	65	69	71	73
0.06	Corps of Engineers	129	141	145	149	159	163	168
0.07	Colville Settlement	17	17	17	17	20	20	20
0.19	U.S. Fish & Wildlife Service	15	17	17	18	19	19	20
0.20	Planning Council	8	9	9	9	9	9	9
0.21	Fish & Wildlife	147	139	139	139	139	139	139
0.23	Transmission Business Line	241	265	269	279	289	300	309
0.24	Conservation & Energy Efficiency	58	63	63	63	63	62	62
0.25	Interest	384	461	486	504	524	558	579
0.26	Pension and Health Benefits 1/	18	31	27	23	21	18	18
0.91	Total operating expenses 2/	2,809	3,081	3,150	3,146	2,924	2,959	3,055
Capital investment:								
1.01	Power Business Line	99	111	116	119	133	145	137
1.02	Transmission Line	370	386	269	222	331	409	386
1.03	Conservation & Energy Efficiency	25	30	36	32	32	32	32
1.04	Fish & Wildlife	12	36	36	36	36	36	36
1.05	Capital Equipment	19	31	27	22	23	23	23
1.06	Capitalized Bond Premiums	0	3	3	3	3	3	3
1.07	Total Capital Investment 3/	525	597	487	434	558	648	617
2.01	Projects Funded in Advanced	11	28	90	142	78	20	20
10.00	Total obligations 4/	3,344	3,706	3,727	3,722	3,560	3,627	3,692

The accompanying notes are an integral part of this table.

- 1/ See interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of PensionI & Post-retirement Benefits cost estimates.
- 2/ Reflects expense obligations, not accrued expenses.
The Power Business Line includes Fish & Wildlife, Residential Exchange, Planning Council, Conservation & Energy Efficiency and Associated Project Costs which have been shown separately for display purposes.
- 3/ Reflects capital obligations, not capital expenditures.
- 4/ This FY 2005 budget includes capital and expense estimates for the Power Business Line based on the SN CRAC rate proposal. The Transmission Business Line capital and expense estimates are based on the TBL rate Settlement Agreement and final 2004 transmission rate proposal. Capital investment levels also reflect management decisions from BPA's cross-agency Business Operations Board review process. Estimates included in this budget also reflect the significant changes affecting the West Coast power and transmission markets along with planned infrastructure investments designed to address the long-term needs of the region. FY 2003 costs are based on BPA's audited actual financial results.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

Refer to 16 USC Chapters 12B, 12G, 12H, and BPA's other organic laws, including P.L. 100-371, Title III, Sec. 300, 102 Stat. 869, July 18, 1988 regarding BPA's ability to obligate funds.

Program and Financing (continued)

Current Services
(in millions of dollars)

		est.						
		2003	2004	2005	2006	2007	2008	2009
Financing:								
21.90	Unobligated balance available, start of year. Treasury balance 3/	(121)	(240)	(240)	(240)	(240)	(240)	(240)
24.40	Unobligated balance available, end of year. Treasury balance 3/	(240)	(240)	(240)	(240)	(240)	(240)	(240)
25.00	Unobligated balance lapsing	0	0	0	0	0	0	0
39.00	Budget authority (gross)	3,822	3,706	3,727	3,722	3,560	3,627	3,692
Budget Authority:								
61.00	Transfer to other accounts	(138)						
66.10	Contract Authority	203						
67.10	Permanent Authority: Authority to borrow from Treasury (indefinite) 4/	470	216	295	339	380	464	527
69.00	Spending authority from off-setting collections	3,566	3,736	3,737	3,732	3,569	3,637	3,702
69.47	Portion applied to debt reduction 5/	(543)	(246)	(305)	(349)	(389)	(474)	(537)
69.90	Spending authority from offsetting collections (adjusted)	3,352	3,490	3,432	3,383	3,180	3,163	3,165
Relation of obligations to outlays:								
71.00	Total obligations	3,344	3,706	3,727	3,722	3,580	3,627	3,692
Obligated balance, start of year:								
72.47	Authority to borrow	414	617	617	617	617	617	617
74.47	Authority to borrow	(617)	(617)	(617)	(617)	(617)	(617)	(617)
87.00	Outlays (gross)	3,103	3,727	3,727	3,722	3,560	3,627	3,692
Adjustments to budget authority and outlays:								
Deductions for offsetting collections:								
88.00	Federal funds	(36)	(90)	(90)	(90)	(90)	(90)	(90)
88.40	Non-Federal sources	(3,530)	(3,646)	(3,647)	(3,642)	(3,479)	(3,547)	(3,612)
88.90	Total, offsetting collections	(3,566)	(3,736)	(3,737)	(3,732)	(3,569)	(3,637)	(3,702)
89.00	Budget authority (net)	283	(30)	(10)	(10)	(9)	(10)	(10)
90.00	Outlays (net) 6/	(462)	(30)	(10)	(10)	(9)	(10)	(10)

The accompanying notes are an integral part of this table.

3/ Treasury balance and unobligated balance estimates assume that BPA will borrow from Treasury the amount needed to finance the full capital program. Actual Treasury borrowing and cash balances will be different, depending on net revenues, Treasury interest rates, and other cash management factors. Borrowing could be higher such that cash balances at the end of each year could equal total reserves.

- 4/ The Permanent Authority: Authority to borrow (indefinite) from Treasury amounts reflect both BPA's capital program financing needs and either the use of, or creation of, deferred borrowing. Deferred borrowing is created when, as a cash and debt management decision, BPA uses cash from revenues to liquidate capital obligations in lieu of borrowing from Treasury. This temporary use of cash on hand instead of borrowed funds creates the ability in future years to borrow money, when fiscally prudent. Technical Executive Branch budget display and tracking requirements have modified the way BPA shows this deferred borrowing as a resource carried forward from year-to-year. This amount must therefore be added to, or subtracted from, BPA's current year Treasury borrowing authority amount, making this number a combination of capital program financing needs and the annual use, or creation of deferred borrowing. The FY 1989 Energy and Water Development Appropriations Act (P.L. 100-371 of 7/19/88) clarified that BPA has authority to incur obligations in excess of Treasury borrowing authority and cash in the BPA Fund. The two amounts which comprise the net amount of line 67.15 above are as follows:

	FISCAL YEAR						
Treasury Borrowing Authority:	2003	2004	2005	2006	2007	2008	2009
to finance capital obligations	469	617	487	434	558	648	617
to finance other obligations	1	(401)	(192)	(95)	(178)	(184)	(90)
Total Treasury Borrowing Authority (67.15)	470	216	295	339	380	464	527

- 5/ Includes amortization of BPA and Corps of Engineers appropriations and amortization of BPA bonds. Line 69.47 is referred to as capital transfers on BP-3.
- 6/ Net Outlay estimates are based on current cost savings to date and anticipated cash management goals. They are expected to follow anticipated management decisions throughout the rate period that along with actual market conditions will impact revenues and expenses. Actual Net Outlays are volatile and are reported in SF-133. Estimated net outlay estimates could change due to changing market conditions, hydro conditions and continuing restructuring of the electric industry.

Revenues, included in the Net Outlay formulation, are calculated consistent with cash management goals and assume a combination of adjustments. Assumed adjustments include the use of a combination of tools, including upcoming CRAC adjustments, reduced cost estimates, a net revenue risk adjustment, debt service refinancing strategies and/or short-term financial tools to manage net revenues and cash. Some of these potential tools will reduce costs rather than generate revenue, however causing the same net outlay result. Adjustments for depreciation and 4(h)(10)(C) are also assumed.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4A

		Fiscal Year					
		2003			2004		
		Net Capital Obs Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Obs Subject to BA	Bonds Out- Standing
Start-of-Year: Total		3,078	2,764	2,770	2,559	3,069	2,697
Plus: Annual Increase 1/							
Cum.-Annual Treasury Borrowing A. I		473	473		598	598	
Treasury Borrowing (Cash)				410			598
Less:							
Total BPA Bond Amortization		483	483	483	119	119	119
Net Increase/(Decrease):							
Total		(9)	(9)	(73)	479	479	479
Cum.-End-of-Year: Total		3,069	2,755	2,697	3,089	3,547	3,176
Total Remaining Treasury Borrowing Authority				<u>1,753</u>			<u>1,274</u>
Total Legislated Treasury Borrowing Authority				4,450			4,450

The accompanying notes are an integral part of this table.

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4B

		Fiscal Year							
		2005				2006			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total		1,757	3,547	3,152	3,176	2,041	3,831	3,436	3,460
Plus: Annual Increase 1/									
Cum.-Annual Treasury Borrowing A. In		487	487	487		435	435	435	
Treasury Borrowing (Cash)					487				435
Less:									
Total BPA Bond Amortization		204	204	204	204	130	130	130	130
Net Increase/(Decrease):									
Total		283	283	283	283	305	305	305	305
Cum.-End-of-Year: Total		2,041	3,831	3,436	3,460	2,345	4,135	3,740	3,764
Total Remaining Treasury Borrowing Authority					<u>990</u>				<u>686</u>
Total Legislated Borrowing Authority					4,450				4,450

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BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT LEGISLATION
(in millions of dollars)

BP-4C

		Fiscal Year							
		2007				2008			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing	Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total		2,345	4,135	3,740	3,764	2,792	4,582	4,187	4,210
Plus: Annual Increase 1/									
Cum.-Annual Treasury Borrowing A. In	558	558	558			648	648	648	
Treasury Borrowing (Cash)					558				648
Less:									
Total BPA Bond Amortization	111	111	111	111		245	245	245	245
Net Increase/(Decrease):									
Total	446	446	446	446	446	404	404	404	404
Cum.-End-of-Year: Total	2,792	4,582	4,187	4,210		3,195	4,985	4,590	4,614
Total Remaining Treasury Borrowing Authority					<u>240</u>				<u>(164)</u>
Total Legislated Borrowing Authority					4,450				4,450

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1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

**BONNEVILLE POWER ADMINISTRATION
BPA STATUS of TREASURY BORROWING
CURRENT LEGISLATION**

(in millions of dollars)

BP-4D

		Fiscal Year			
		2009			
		Net Capital Obs	Net Capital Subject to BA	Net Capital Expend.	Bonds Out- Standing
Start-of-Year: Total		3,195	4,985	4,590	4,614
Plus: Annual Increase 1/					
Cum.-Annual Treasury Borrowing A. In	617	617	617		
Treasury Borrowing (Cash)					617
Less:					
Total BPA Bond Amortization	150	150	150	150	150
Net Increase/(Decrease):					
Total	467	467	467	467	467
Cum.-End-of-Year: Total	3,662	5,452	5,057	5,057	5,081
Total Remaining Treasury Borrowing Authority					(631)
Total Legislated Borrowing Authority					4,450

The accompanying notes are an integral part of this table.

1/ In any given year, BPA may issue less debt than forecast depending on net revenues, Treasury interests rates, and other cash management factors. In such cases, BPA accumulates a deferred borrowing balance that it accesses as necessary in the future.

Capital investments reflect management decisions from BPA's Cross-Agency Business Operations Board review process.

Budget estimates included in this budget are subject to change due to rapidly changing economic and institutional conditions in the evolving competitive electric utility industry in the Pacific Northwest.

TREASURY PAYMENTS

(in millions of dollars)

FISCAL YEAR

	2003	2004	2005	2006	2007	2008	2009
A. INTEREST ON BONDS & APPROPRIATIONS							
Bonneville Bond Interest							
1 Bonneville Bond Interest (net)	156	190	218	238	260	300	330
2 AFUDC 1/	33	30	35	29	24	31	38
Appropriations Interest							
3 Bonneville	65	43	38	38	33	28	21
4 Corps of Engineers 2/	153	170	172	169	172	172	169
5 Lower Snake River Comp. Plan	16	16	16	16	16	16	16
6 Bureau of Reclamation Interest 3/	43	42	42	42	42	42	42
7 Total Bond and Approp. Interest	466	492	521	532	548	589	617
B. ASSOCIATED PROJECT COST							
8 Bureau of Reclamation Irrigation Assistance	0	1	0	0	0	0	7
9 Bureau of Rec. O & M 4/	1	0	0	0	0	0	0
10 Corps of Eng. O & M 4/	11	0	0	0	0	0	0
11 L. Snake River Comp. Plan O & M 4/	0	0	0	0	0	0	0
12 Total Assoc. Project Costs	12	1	0	0	0	0	7
C. CAPITAL TRANSFERS							
Amortization							
13 Bonneville Bonds 5/	483	119	204	130	111	245	150
14 Bureau of Reclamation Appropriations	18	0	0	1	0	1	0
15 Corps of Engineers Appropriations	4	61	98	108	205	138	257
16 Lower Snake River Comp. Plan	0	0	0	0	0	0	0
17 Bonneville Appropriations	39	66	2	110	73	90	130
Total Capital Transfers	544	247	303	348	389	473	537
D. OTHER PAYMENTS							
18 Unfunded CSRS Liability 6/	35	31	27	23	21	18	18
21 TOTAL TREASURY PAYMENTS 7/	1,057	770	851	904	958	1,081	1,179

The accompanying notes are an integral part of this table.

1/ This interest cost is capitalized and included in Bonneville's Transmission System Development, System Replacements, and Associated Projects Capital programs. AFUDC is financed through the sale of bonds.

2/ Includes interest on construction funding for Corp of Engineers (Corps) fish bypass facilities at Corps dams in the Columbia River Basin, including Lower Monumental, Ice Harbor, and The Dalles.

3/ Includes payments paid by Bureau to Treasury on behalf of Bonneville.

4/ Costs for power O&M is funded directly by Bonneville as follows (in millions)

	FISCAL YEAR	2003	2004	2005	2006	2007	2008	2009
Bureau of Reclamation		54	61	63	65	69	71	73
Corps of Engineers		122	141	145	149	159	163	168
Lower Snake River Comp. Plan		15	17	17	18	19	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Starting in FY 2003 direct funding for Corps is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for Corps direct funded O&M, as is the current Corps capital direct funding.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O&M items. Funding for these small capital power items is included within the PBL capital budget.

5/ FY 2003 payment includes a portion of future planned amortization consistent with BPA's capital strategy plan and debt optimization plan.

6/ See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of these cost estimates.

7/ Does not include Treasury bond premiums on refinanced Treasury bonds.

OBJECT CLASSIFICATION STATEMENT

(in millions of dollars) 1/

IDENTIFICATION CODE: 89-4045-0-3-271

DIRECT OBLIGATIONS

ESTIMATES

	2003	2004	2005
11.1 Full-time permanent	193	214	215
11.3 Other than full-time permanent	0	0	0
11.5 Other personnel compensation	9	10	10
11.9 Total personnel compensation	202	224	225
12.1 Civilian personnel benefits	53	59	60
21.0 Travel and transportation of persons	12	13	13
22.0 Transportation of things	2	2	2
23.1 Rental payments to GSA	1	1	1
23.2 Rents, other	36	40	40
23.3 Communication, utilities & misc. charges	5	5	5
24.0 Printing and reproduction	0	0	0
25.1 Consulting Services	0	0	0
25.2 Other Services	2,028	2,249	2,262
25.3 Purchases from Government Accounts	0	0	0
25.4 O&M of Facilities	0	0	0
25.5 R & D Contracts	0	0	0
26.0 Supplies and materials	117	129	130
31.0 Equipment	0	0	0
32.0 Lands and structures	83	92	92
41.0 Grants, subsidies, contributions	308	342	343
43.0 Interest and dividends	497	550	553
99.0 Total obligations	3,344	3,706	3,726

- 1/ Includes object classifications developed from updated GL accounting codes consistent with implementation of BPA's business enterprise system of accounts. The object classifications are subject to change as BPA's GL accounting codes continue to evolve to more effectively meet management information needs, and meet FERC and Federal reporting requirements.

Estimate of Proprietary Receipts
(in millions of dollars)

	Fiscal Year						
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
Bureau Interest	43	42	42	42	42	42	42
Bureau Amortization	18	0	0	1	0	1	0
Bureau O&M	1	0	0	0	0	0	0
Bureau Irrig. Assist.	0	1	0	0	0	0	7
Revenues Collected by Bureau	-7						
Distributed in Treasury Account (credit)		-7	-7	-7	-7	-7	-7
Colville Settlement (credit)	-5	-5	-5	-5	-5	-5	-5
Total 1/ Reclamation Fund	50	31	31	31	31	31	37
Corps O&M	11						
CSRS	35	31	27	23	21	18	18
Total 2/ Repayments on misc.costs	46	31	27	23	21	18	18

1/ Includes amortization of appropriations and irrigation assistance, and interest costs for the Bureau of Reclamation. The cost of power O&M for Bureau of Reclamation is no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfer to Account #895000.26

2/ The costs of power O&M for Corps of Engineers and Lower Snake Comp. Plan are no longer included in Proprietary Receipts due to Direct Funding by Bonneville. Represents transfers to Account #892889, Repayments on misc. recoverable costs, not otherwise classified. Costs for power O&M is funded directly by Bonneville as follows (in millions)

	2003	2004	2005	2006	2007	2008	2009
Bureau of Reclamation	54	61	63	65	69	71	73
Corps of Engineers	122	141	145	149	159	163	168
Lower Snake River Comp Plan	15	17	17	18	19	19	20

Bureau O&M budget estimates do not reflect approximately \$10 million in Bureau of Reclamation cost savings of which \$3 million can be spent in a single fiscal year.

Starting in FY 2003 direct funding for Corps is expected to be accomplished through a transfer appropriation fund symbol. This will assure that the Bonneville Fund contains both the obligation and outlay for Corps direct funded O&M, as is the current Corps capital direct funding.

Bonneville, through FY 2006, also directly funds the Corps of Engineers \$6 million annually for small capital power O&M items. Funding for these small capital power items is included within the PBL capital budget. See Interest Expense, Pension & Post-retirement Benefits and Capital Transfers section of this budget for a complete discussion of Pension & Post-retirement Benefits cost estimates.

Executive Summary
BPA Fish and Wildlife MOA Funding
(Dollars in Millions)
April 2, 2002

	FY	Actual 1996	Actual 1997	Actual 1998	Actual 1999	Actual 2000	Actual 2001	96-01 Total	96-01 Avg
Direct Program Expenses									
MOA Plan		100.0	100.0	100.0	100.0	100.0	100.0	600.0	100.0
Avg Expenditure Amount Available 1/		100.0	133.1	153.5	150.6	144.6	138.6		
Actual (FY 1996-2001) 2/		68.5	82.2	104.9	108.2	108.2	101.1	573.0	95.5
Carry Forward Balance 3/ 4/		31.5	50.9	48.6	42.5	36.4	37.5		
Reimbursable F&W Expenses of Other Agencies									
MOA Plan		38.4	40.5	40.5	40.5	40.5	40.5	240.9	40.2
Avg Expenditure Amount Available		40.2	45.3	50.0	54.4	56.6	60.4		
Actual (FY 1996-2001)		35.4	35.9	36.4	38.9	37.6	42.4	226.6	37.8
Carry Forward Balance 4/		4.8	9.4	13.6	15.5	19.0	18.0		
Capital Investments Fixed Expenses									
MOA Plan		73.1	87.2	105.7	117.7	129.3	129.3	642.3	107.1
Avg Expenditure Amount Available 1/		111.5	151.9	190.3	233.3	278.4	325.2		
Actual (FY 1996-2001)		73.0	76.3	74.2	76.1	77.2	77.1	453.9	75.7
Carry Forward Balance 4/		38.5	75.6	116.1	157.2	201.2	248.1		
Total									
MOA Plan		211.5	227.7	246.2	258.2	269.8	269.8	1,483.2	247.2
Avg Expenditure Amount Available 1/		251.7	330.3	393.8	438.3	479.6	524.2		
Actual Expenditures		176.9	194.4	215.5	223.2	222.9	220.7		
Carry Forward Balance 4/		74.8	135.9	178.3	215.1	256.6	303.6		
River Operations									
Power Purchases		0.0	0.0	5.4	47.6	64.8	1,389.6	1,507.4	251.2
Foregone Revenues		81.7	107.8	116.5	197.8	193.1	115.9	812.8	135.5
Other 6/		1.6	2.4	-1.9	5.9	79.1	0.0	87.1	14.5
Total		83.3	110.2	120.0	251.3	337.0	1,505.5	2,407.3	401.2
Actual Expenditures Grand Total		260.2	304.6	335.5	474.5	559.9	1,726.2	3,660.9	610.1 5/
ESA Related Transmission Enhancements		0.0	12.7	1.6	0.1	0.9	1.9	17.2	2.9

Assumptions:

Expenditure Plan and River Operations equal display in BPA's FY 2003 Congressional Budget. Actual Expenditures for all expenses and capital investments reflect FY 1996 - 2001 actual results. This funding stream shows the most likely accruals related to Obligations from the NWPPC prioritization process. Actual accruals may be more or less during a given year within the year MOA period.

Notes:

1/ In addition, \$27 million per year in capital funding (borrowing) provided by BPA for the Direct Program through 2001. The Interest and Amortization for this is reflected in the Expenditures Plan for the Capital Investment category.

2/ This information is reported on an accrual basis. For Direct Program management purposes, BPA also reports these expenditures on an obligations basis. Typically the accruals lag the obligations, since not all funds are expended in the year in which they are obligated.

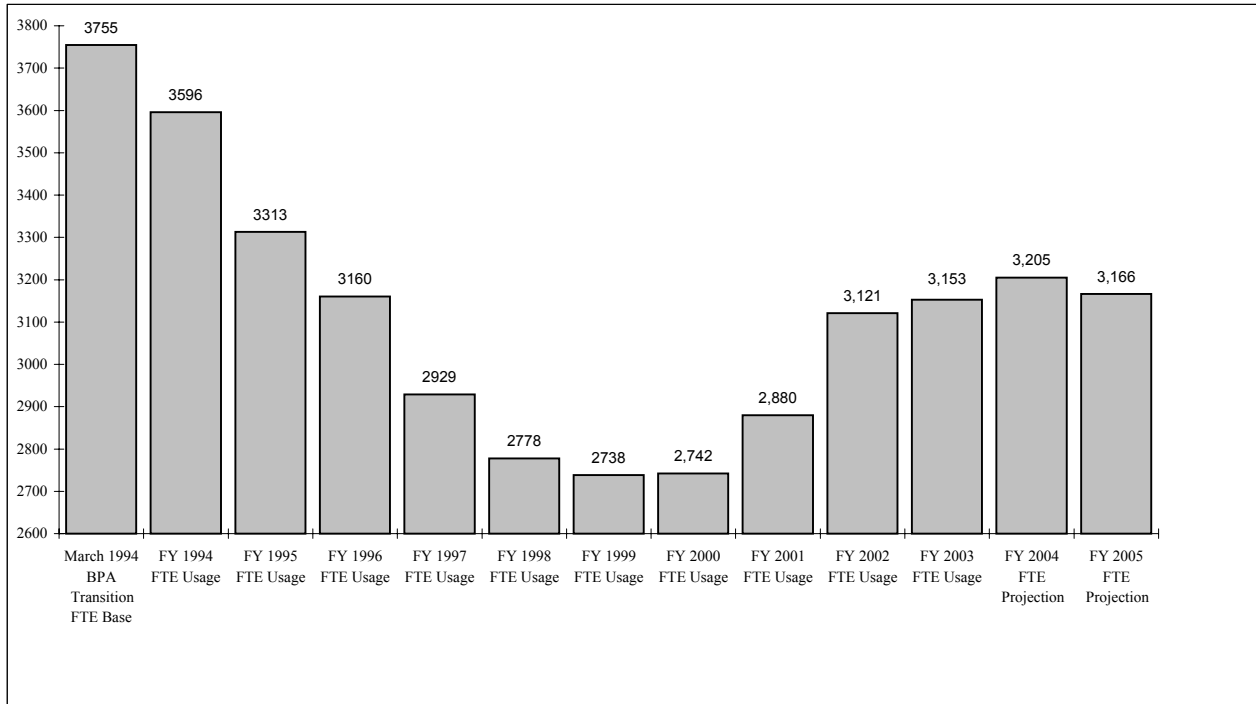
3/ BPA's FY 1996 - 2001 Fish and Wildlife Program Expense Budget is \$100 million per year. Actual expenses for FY 1996 - 2001 were approximately \$37.5 million less than what was available.

4/ Original MOA Plan included interest at 5.093 percent for FY 1999 - 2001. The actual interest rate is determined annually (10/1). The interest rate for FY 1996 is 5.083%, 1997 is 5.093%, 1998 is 4.221%, 1999 is 4.864%, 2000 is 6.193%.

5/ During the initial discussions when developing the MOA, the "96-01 Avg" was estimated to be about \$435 million.

6/ These estimated costs are related to limitations placed on operating ranges (forebay levels and generator efficiency) and other operations for fish which produce effects on power production not identified in Hydro regulation models.

BONNEVILLE FTE
(Revised January 2004)



BPA has utilized the following number of Voluntary Separation Incentives (VSIs): 190 in FY 1994, 240 in FY 1995, 137 in FY 1996, 135 in FY 1997, 121 in FY 1998, 81 in FY 1999, 43 in FY 2000, 12 in FY 2001, 0 in FY 2002, and 80 in FY 2003.

As part of its strategic staffing efforts and infrastructure project requirements, Bonneville has seen an increase in FTE levels since FY 2000. This increase, peaking in FY 2004, is designed in part to accommodate a shift in critical skills needed to meet the demands of succeeding in an increasingly deregulated energy market.